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ABSTRACT

The career and educational experiences of the baccalaureate degree recipients of the University of California at Irvine (UCI) during the first decade of its existence, 1965-74, were studied. A response from 2,479 alumni, or 51 percent, provided information concerning: (1) educational attainment; (2) initial employment after graduation; and (3) current employment of UCI graduates. In addition, separate analyses were undertaken of respondents in relation to their academic school or program of study. Special attention is directed to a comparison of academic aspiration and attainment, the level and types of graduate programs selected by the survey respondents, the pursuit of academic graduate degrees, the institutions selected for graduate study and the employment of graduate degree holders. In addition to determining the initial occupations most frequently pursued by UCI graduates, the data provided information on: the relationship between success in obtaining jobs in chosen fields and the UCI school or program from which one graduates, the significance of previous part-time and/or summer work in obtaining a job in a chosen field, and the relationship between starting salaries and the UCI school or program from which one graduates. Employment information was collected concerning: career fields, location and type of employer, current annual salaries, employment in chosen field, job satisfaction, relevance of undergraduate education to job, job performance without college education, and notable undergraduate career-related experiences. Analyses of minorities and transfer students are also included. A survey questionnaire is appended. (SW)

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UCI Alumni and Their Careers - A survey of the
graduate training and work experience of the first decade of
University of California, Irvine alumni.

UCI ALUMNI AND THEIR CAREERS

University of California, Irvine
Office of the Vice Chancellor
University and Student Affairs

October, 1977

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The survey research for UCI Alumni and Their Careers was developed through the cooperation of the UCI University and Student Affairs Grants, Studies and Research Office, and the Career Planning and Placement Center under the direction of Dr. Melvin Bernstein. The research design for the survey was prepared by Lynn Bailiff, formerly of the UCI staff and currently Special Assistant to the Vice Chancellor of the University of California, Berkeley. The Editorial content of the report was carefully developed by Bruce Riesenberg, Assistant Director of the Career Planning and Placement Center. Messrs. Bailiff and Riesenberg's considerable effort in developing the survey and final report was substantially aided by Cheryl O'Neal (research assistance), Barbara Davidson and Toby Milligan (editorial assistance).

This initial report based on 1975 data, will be followed by a second and more comprehensive survey currently being undertaken by the Grants, Studies and Research Office under the supervision of the Director, Dr. Maurice Salter. The results of the 1977 survey will be available early in 1978. UCI will continue to survey the Alumni every two years for the foreseeable future.

UCI Alumni and Their Careers

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INTRODUCTION

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UCI Alumni and Their Careers is a report on the career and educational experiences of the baccalaureate degree recipients of UCI during the first decade of its existence, 1965-74. From the outset it was hoped that the data gathered through this comprehensive survey would provide substantive career information for prospective and currently enrolled students and could also be of assistance in planning future campus programs. Under the direction of the Office of Grants, Studies and Research, the project was conducted in anticipation of a similar survey effort planned by the California State Legislature for use in reporting on the career experiences of graduates of both the University of California and the California State Universities and Colleges.

It is the purpose of this report to present an overview of the survey findings developed from 2,479 survey respondents over the nine-year period under study. The response rate of 51% of all those graduates receiving a questionnaire, far exceeded the expected rate of 40%. Included in this report is a summary of the data gathered pertaining to three major issues: (1) educational attainment; (2) initial employment after graduation; and (3) current employment of UCI graduates. In addition, a separate section has been included dealing with a subgroup analysis of the respondents of each UCI academic school or program.

A new university has an obligation to engage in continual self-study which older, more established institutions may find less necessary. The young, still evolving campus must assess its progress toward the stated goals it has set for itself and evaluate the effectiveness of its activities and services.

Such attempts at evaluation serve as valid tools in planning for the future, in assisting the university to become more cognizant and understanding of the internal and external forces which influence its development, and in permitting informed decision making with respect to how and where university resources should most appropriately be expended.

The University of California, Irvine has pursued a number of self-study projects in its effort to confirm its commitment to excellence in offering academic and public service programs. Most recently, eager to learn more about the educational and career achievements of UCI alumni, a comprehensive survey of the men and women who had received bachelor's degrees during UCI's first ten years, 1965-1974, was initiated.

We have published the findings of this survey in the belief they contain significant information for the University community as a whole, for prospective students, for the general public, and for business, industry and other organizations that look to the University as a source of educated manpower.

Few students today can afford the luxury of pursuing a university education purely as an intellectual exercise. They must also consider how their academic experience will translate into the pursuit of satisfying and challenging careers. Increasingly, prospective students ask thoughtful and important career-oriented questions as they engage in the process of selecting the college or university they will attend. This report and its candid presentation of the educational and career experiences of UCI alumni should be useful to students, their counselors, and parents in assessing the University's ability to assist in the attainment of educational and career goals.

Publishing this report is also in the interest of the public--those supportive as well as those critical of higher education--and provides a clearer picture of the results of the educational mission of at least one university.

UCI Alumni and Their Careers should be of import to the business, industrial, and governmental organizations and other institutions that consider the University a key source of talented manpower. An analysis of this report may help indicate trends in the career interests of future employees, and does point out significant factors related to motivation and job satisfaction.

In assessing the progress of UCI alumni toward their career goals, it should be noted that, although the survey covered graduates over a ten-year period of time, 95% of the respondents graduated within the past seven years. Consequently, a large number of alumni were

either attending graduate or professional school or had only recently entered career positions at the time they completed the questionnaire.

The findings of this study corroborate the observations of an earlier UCI study of graduating seniors' career expectations*, and underscore the strong academic and professional orientation of the graduates of several academic schools (i.e., Biological Sciences, Humanities, Physical Sciences and Social Sciences) who have pursued careers in medicine, administration, teaching, research or law. The data also confirm the ability of graduates in Engineering and Information and Computer Science to obtain career-related employment upon graduation.

The survey results also support what the University believed to be true: That a high percentage of its alumni go on to graduate study after receiving the bachelor's degree. These data are particularly significant when viewed in relation to the academic aspirations of currently enrolled students. Studies of recent entering students reveal that 84% intend to obtain a degree beyond the baccalaureate, while, in fact, 75% of the UCI alumni surveyed held or were pursuing an advanced degree or credential.

The report analyzes the history of UCI alumni in their pursuit of both academic and professional graduate degrees, pointing out

*Norman Lynn Bailiff, Jr. and Melvin H. Bernstein, "The Class of '74: Educational and Career Plans of UC Irvine Graduates."

the implications of advanced training with respect to present and anticipated demands of the labor market, particularly in the area of advanced academic degrees.

While survey results indicate a decrease in the number of graduates whose initial employment was in the field of their choice, this information is not pessimistic when studied in relation to the high percentage (71%) of respondents who reported they were currently employed in their chosen field. The employability of UCI graduates is additionally illuminated by the relatively small number of survey respondents who indicated they were unemployed and/or still seeking a job: At the time of the survey, the unemployment rate was 8.9% for Orange County and 9.9% for California.

A study of the survey data reveals several areas which suggest new or expanded directions for the University. For example, the majority of liberal arts graduates appear to be successful in the pursuit of their stated educational goals but have some difficulty in meeting the demands of the labor market. To help offset this situation, the Career Planning and Placement Center is working with faculty members to develop career-oriented programs, workshops and seminars which are tailored to the needs of the committed liberal arts major. These efforts have included such projects as a special program concerning careers for liberal arts graduates in which numerous off-campus resource people have participated, a credit course in career planning conducted in cooperation with the School of Humanities, and a seminar for foreign language majors which focused on increasing student awareness of career options for those with language skills.

Another example of the implications of the survey's findings is the significant increase reported by respondents of the importance of internships, part-time or summer work experience in securing their first job, information which supports the continuing efforts of the UCI Career Planning and Placement Center to assist students to obtain part-time work in career-related positions and to generate increased opportunity for intern experience for an undergraduate.

The survey findings also suggest that the majority of UCI's women graduates are working in traditional teaching and clerical positions, that fewer women than men are pursuing academic and professional graduate degrees, and that fewer women than men find initial employment in their chosen field. While this may be a reflection of the then current labor market, and perhaps some tendency for women to set lower goals for themselves, it also suggests major responsibilities for the University in identifying new sources of employment for women graduates and in encouraging and assisting women students to vigorously pursue educational and career objectives formerly denied them. Again, the Career Planning and Placement Center has been moving positively in this direction by sponsoring workshops which focus on career planning, job search skills, interviewing experience and also, by providing opportunities for women students to meet and talk with professional women who can serve as successful resource people. The Center has encouraged the establishment of training programs in non-traditional fields specifically for women in business, industry and government.

While the survey data are inadequately representative of the current minority population at UCI because of the substantial increase in minority enrollment during the past decade (2% of freshmen in 1965 to 21% of freshmen in 1976), they provide an indication of what might be anticipated in the future in regard to the needs, aspirations and achievements of minority students.

Recognizing the need for the continual upgrading of career counseling and placement services, UCI's Center has embarked upon a campaign to secure extramural funding to support both new and expanded programs. Such activity has resulted in the initiation of one of the most innovative services offered by the Center, a computer-based career guidance program, SIGI (System of Interactive Guidance and Information). UCI, with the support of a grant from the Kellogg Foundation, is the first four-year college or university in the western United States to install the system which was developed by the Educational Testing Service.

The system involves interaction between a student and a computer terminal which has a television screen, keyboard and printer. SIGI enables students to clarify their values and to identify occupations or career fields consistent with those values. SIGI also assists students in planning an academic program leading to the career field they've selected.

SIGI is an important resource for all students but particularly for women, minority and non-traditional students as it is free of the bias and subjectivity often found in more conventional career advisement methods.

The Center is also involved in the development of additional support in the Orange County business and professional community, an area which the survey data indicate is the primary location of employment for UCI graduates. This effort has included the appointment of an advisory board composed of community business and government leaders and members of the UCI faculty.

The needs of university and college students are ever-changing as they prepare themselves for professional roles and careers during the next several decades. The ultimate success of an educational institution like the University of California, Irvine lies in its ability to wisely assess and respond to the future and the educational requirements of young people. UCI is greatly appreciative of the exceptional response of its alumni to this survey.

The initial purpose for the survey was not purely to inform ourselves of how our alumni are doing in employment, but to try to ascertain new ways to assist current students in their preparation for today's job market. Some of the findings of this study have already prompted significant alterations in our services to students; more are contemplated. Because we believe that this sample is not

unrepresentative of the general population of university students,
we consider that this report is of value to prospective students, to
current students, to other educational institutions and to employers.

I. EDUCATIONAL ATTAINMENT

The focus on the educational attainment of UCI graduates covers the period 1965-1974. Specific attention will be given to a comparison of academic aspiration and attainment, the level and types of graduate programs selected by the survey respondents, the pursuit of academic graduate degrees, the institutions selected for graduate study, and the employment of graduate degree holders.

Academic Aspirations and Attainment

Results of the Career Experiences Survey support previous survey findings regarding the high academic aspirations of UCI students and their desire to seek careers in fields requiring extensive graduate or professional study. In the 1975 American Council on Education survey of UCI incoming students, 26% indicated that they aspired to receive a Master's degree, and the Career Experience Survey indicates that in fact 27% of the graduates surveyed received or were pursuing a Master's degree.⁽¹⁾ Nineteen percent of the incoming students intended to receive a Ph.D. or Ed.D., and in fact 9.1% of the survey respondents have received or are working toward these degrees. The M.D., D.D.S., D.O., or D.V.M. degree was the objective of 24% of the incoming students, and 7.1% of the surveyed respondents were progressing toward or held one of those degrees. Finally, 6% of the incoming students intended to pursue a law degree, and 5.4% of the graduates responding were doing just that.

(1) Cooperative Institutional Research Program conducted by the American Council on Education and UCLA, 1975

As a whole, fully 75% of the survey respondents had completed or were currently enrolled in graduate or professional schools. At least one graduate degree and/or credential had been completed by 895 (36.8%) survey respondents. A larger number, 917 (37.8%), were still enrolled in graduate programs leading to a degree or credential. (See Table 1.)

Teaching Credentials. Of all survey respondents, 404 (16.6%) held at least one teaching credential at the time of the survey; an additional 70 respondents were working toward teaching credentials. Almost all of these alumni (90%) were pursuing or had pursued programs at the elementary or secondary levels; 7% were at the community college level; and the remaining 3% were in areas of special or adult education. Approximately two-thirds of the individuals who held teaching credentials (257) were actually employed as teachers. Graduates of the School of Humanities comprised the largest portion of credential holders, although graduates of other schools and programs were well represented. Seventy percent of those holding teaching credentials were women and 30% were men.

Academic Master's Degrees. A total of 482 (19.9%) respondents either held or were pursuing Master's degrees in an academic discipline. Of these, approximately 40% were women and 60% men. The fields of study most often selected were social sciences (15.4%); biological sciences (12.0%), administration (10.8%), and physical sciences (7.3%).

Academic Doctorate Degrees. A total of 217 (8.9%) of the respondents had elected to pursue a doctorate in an academic discipline. Approximately three-quarters of those who were seeking or had completed a Ph.D.

TABLE 1.
GRADUATE DEGREES OR CREDENTIALS HELD
OR PURSUED BY UCI GRADUATES 1966-74

Type Degree/Credential	Held	Currently Pursuing	Total
Teaching Credential	404 16.6%	70 2.9%	474 19.5%
Academic Master's Degree	223 9.2	259 10.7	482 19.9
Professional Master's Degree	74 3.0	90 3.7	164 6.7
Academic Doctorate	30 1.2	187 7.7	217 8.9
Law Degree (J.D.)	37 1.5	94 3.9	131 5.4
Medical Degree (M.D.)	22 .9	105 4.3	127 5.2
Other Professional Doctorate	27 1.1	61 2.5	88 3.6
All Others	78 3.2	51 2.1	129 5.3
TOTAL	895	917	1,812
% of all respondents*	36.8%	37.8%	74.6%

*Based upon 2,431 valid responses to this item.

degree were men, and one-quarter were women. The fields of study most often represented were biological sciences (27.0%), physical sciences (20.2%), social sciences (16.2%), psychology (10.4%), and humanities (8.6%).

Professional Master's Degrees. Professional Master's degrees were held or were being pursued by 164 (6.7%) of the respondents. It is of particular interest to note that 50% of these respondents were women. Among those fields of study most often represented were business/administration (25.3%), fine arts (16.3%), library science (9.6%), and education (5.4%).

Law Degrees (J.D.). Law degrees were either held or being pursued by 131 (5.4%) of the respondents, approximately two-thirds of whom were men and one-third were women. Of those respondents, 91% had been in one of four UCI undergraduate schools or programs: Humanities (38.9%), Social Sciences (36.6%), Social Ecology (8.4%), and Biological Sciences (6.9%).

Medical Degrees (M.D.). Medical degrees were either held or being pursued by 127 (5.2%) respondents; 85% were men and 15% were women. Of these, 114 had received their undergraduate degrees in Biological Sciences, nine in Physical Sciences, three in Social Sciences, and one in Humanities. Significantly, the 114 respondents who were Biological Sciences graduates represented 22.3% of all the School of Biological Sciences respondents.

Other Professional Doctorates. Professional doctorates in fields other than law or medicine were either held or being pursued by seventy-three respondents. Of these, 13.7% were women and 86.3% were men, and more than one-third were in dentistry. Other fields of study included podiatry, pharmacy, public health, veterinary medicine, osteopathy, and education.

Other Credentials or Certificates. Credentials or certificates for fields other than teaching were held or being pursued by 129 respondents. Certificates were in such fields as medical technology, dental hygiene, public accounting, and insurance.

Pursuit of Academic Graduate Degrees

The pursuit of academic graduate degrees (M.A., M.S., and Ph.D.) has broad implications in the area of academic planning. Tightening employment market conditions for persons trained in academic disciplines, particularly at the Ph.D. level, are receiving increasingly critical attention. The results of the UCI careers survey indicate that the largest group of respondents having chosen the pursuit of graduate degrees either hold or are working toward academic graduate degrees. The M.A., M.S., or Ph.D. degree was being pursued by 28.7% of all the respondents. (See Table 2.) Therefore, to look at the trend of UCI graduates' pursuit of academic graduate degree is of considerable importance.

As would be expected, the survey results indicate that alumni of certain undergraduate schools and programs more frequently than others elect the

TABLE 2.
ACADEMIC AND OTHER GRADUATE DEGREES HELD
OR PURSUED BY UNDERGRADUATE SCHOOL OR PROGRAM

School or Program	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Human.	ICS	Phys. Science	Social Ecology	Social Science	Total
All Respondents	512	57	104	269	603	94	261	137	394	2,431
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
M.A. or M.S.	15.7	29.3	29.8	9.7	20.5	19.1	20.6	18.6	21.8	19.8
Ph.D.	<u>13.4</u>	<u>8.6</u>	<u>6.7</u>	<u>2.9</u>	<u>6.4</u>	<u>4.3</u>	<u>20.0</u>	<u>5.3</u>	<u>7.6</u>	<u>8.9</u>
TOTAL Academic Degrees	29.1	37.9	36.5	12.6	26.9	23.4	40.6	23.9	29.4	28.7
All Other Graduate Degrees	37.0	6.8	14.5	13.4	20.3	5.4	13.4	12.9	22.5	21.0

pursuit of graduate academic study. Differences were also noted among the percentages holding or pursuing Ph.D.s as opposed to Master's degrees. Of all undergraduate schools and programs, greater than average proportions of alumni from Engineering (29.8%), Comparative Culture (29.3%), Social Sciences (21.8%), Physical Sciences (20.6%), and Humanities (20.5%) either held or were pursuing academic Master's degrees. At the Ph.D. level, the Schools of Physical Sciences (20.0%) and Biological Sciences (13.4%) had significantly larger proportions of graduates either holding or pursuing degrees than those of any other schools or programs.

Although a wide variety of fields of study were represented, over 90% had chosen the pursuit of graduate study in one of ten fields. (See Table 3.) At the Master's degree level, the most frequently pursued field was social sciences (15.4%), followed by biological or health science (12.0%), administration (11.8%), humanities (11.0%), and psychology (9.8%). At the Ph.D. level, the most frequently pursued field was biological or health science (27.0%), followed by physical sciences (20.2%), social sciences (16.2%), psychology (10.4%) and humanities (8.6%).

A separate look at biological and health sciences reveals that biology was by far the most frequently chosen field (40.6%), followed by biochemistry (9.4%), physiology (7.6%), and zoology (7.6%). The most frequently pursued social science fields were history (28.1%), political science (12.7%), and social ecology (11.8%). Of those selecting physical sciences fields, the largest number had chosen

TABLE 3.
ACADEMIC GRADUATE DEGREES HELD
OR PURSUED BY FIELD OF STUDY

Degree Level	Soc. Sci.*	Admin.	Educ.	Bio. or Health Sci.	Hum.	Psych.	Engr. or Env. Sci.	Phys. Sci.	Computer Science	Fine Arts	Other Fields	Total
M.A. or M.S.	74 15.4	57 11.8	45 9.3	58 12.0	53 11.0	47 9.8	38 7.9	35 7.3	15 3.1	19 3.9	41 8.5	482 100.0
Ph.D.	36 16.2	1 .5	4 1.8	60 27.0	19 8.6	23 10.4	8 3.6	45 20.2	6 2.7	3 1.4	12 5.4	217 100.0
All Levels	110 15.7	58 8.3	49 7.0	118 16.9	72 10.3	70 10.0	46 6.6	80 11.4	21 3.0	22 3.1	53 7.6	699 100.0

*Includes history.

physics (37.5%), followed by chemistry (27.5%) and mathematics (23.7%).

In the humanities, over one-third of the respondents either held or were working toward degrees in English and comparative literature; about one-third were studying a foreign language, and 18.1% were pursuing an advanced degree in philosophy. (See Table 4.)

UCI Ph.D. Recipients and the Employment Market

Survey data shows that the pattern of Ph.D. fields selected by UCI graduates over the 1966-1974 survey period differs somewhat from both the supply and demand distribution expected for Ph.D.s nationwide through 1985. (See Table 5.) Fields selected by UCI graduates in which the number of Ph.D.s exceeds the proportions expected nationally include physical sciences, life science (biological and health sciences), social sciences, and psychology. Falling short of national survey norms are the number of UCI Ph.D. candidates in engineering, education, and business and administration. The number of UCI graduates pursuing the arts and humanities is about equal to national expectation. Nonetheless, the expected supply of new Ph.D.s over the 1972-85 period exceeds the expected demand in all fields during that time. The overall supply of new Ph.D.s exceeds by more than three to one the number of new openings for Ph.D.s. (See Table 6.)

Institutions Selected for Graduate Study

Seventy-five percent of the respondents either holding or working toward graduate degrees or credentials identified the institution they attended.

TABLE 4.
DISTRIBUTION OF FIELD CHOICES FOR BIOLOGICAL AND HEALTH AND SCIENCE,
SOCIAL SCIENCE, PHYSICAL SCIENCE AND HUMANITIES FIELDS*

Social Science Fields

Anthropology	3.6%
Archaeology	1.8
Comparative Cultures	2.7
Economics	7.3
Geography	1.8
History	28.1
Political Science	12.7
Social Ecology	11.8
Sociology	9.1
Social Science — General	10.0
All Other	10.9
	100.0%

Humanities Fields

Comparative Literature	6.9%
English	29.2
French	11.1
German	8.3
Oriental Languages	1.4
Philosophy	18.1
Romance Languages	2.8
Slavic Literature	1.4
Spanish	9.7
All Other	11.1
	100.0%

*Includes fields for all M.A., M.S. and Ph.D. degrees held or pursued at the time of the survey.

Physical Science Fields

Physics	37.5%
Chemistry	27.5
Mathematics	23.7
Statistics	2.5
Physical Oceanography	2.5
Medical Physics	2.5
Medical Chemistry	1.2
Astro Physics	1.2
Atmospheric Science	1.2
	100.0%

Biological and Health Science Fields

Biology	40.6%
Biochemistry	9.4
Physiology	7.6
Zoology	7.6
Biostatistics	4.3
Neuroscience	4.3
Microbiology	4.3
Genetics	3.4
Immunology	3.4
Anatomy	3.4
Psychobiology	3.4
All Other	6.7
	100.0%

TABLE 5.
DISTRIBUTION OF Ph.D. FIELDS CHOSEN BY UCI GRADUATES
AND EXPECTED NATIONAL Ph.D. SUPPLY & DEMAND
1972-1985

Field	UCI	Expected New Ph.D. Recipients	New Openings for Ph.D. Holders
Engineering	3.6%	8.6%	15.6%
Physical science	20.2	14.0	17.8
Biological science	27.0	15.8	14.7
Social science	16.2	11.0	10.8
Psychology	10.4	6.5	8.0
Arts & Humanities	10.0	13.6	10.5
Education	4.0	25.5	14.3
Business/Administration	.5	3.3	1.1
Other fields	8.1	1.7	1.9
Total	100.0%	100.0%	100.0%

Source: National data from "Ph.D. Manpower: Employment Demand and Supply 1972-85," U.S. Department of Labor, 1975.

TABLE 6.
EXPECTED SUPPLY AND DEMAND FOR Ph.D. HOLDERS
1972-1985 (IN THOUSANDS)

Field	Supply of New Ph.D.'s	Openings for New Ph.D.'s	Difference
All Fields	583.4	187.4	396.0
Engineering	50.3	29.3	21.0
Physical science	81.9	43.4	38.5
Life science	92.2	27.6	64.6
Social science	64.1	20.2	43.9
Psychology	37.7	15.0	22.7
Arts and humanities	79.6	19.7	59.9
Education	148.8	26.8	122.0
Business/administration	19.2	2.0	17.2
Other fields	9.7	3.6	6.1

Source: National data from "Ph.D. Manpower: Employment Demand and Supply 1972-85," U.S. Department of Labor, 1975.

Of these respondents, 19.2% had chosen to pursue their graduate study at UCI and 20.0% had selected another UC campus. A California State University or College campus was the choice of 17.5%, and 15.2% had selected private institutions in California. More than one-quarter (28.0%) of the respondents had selected out-of-state institutions.

Graduates from Engineering, ICS, and Physical Sciences more frequently than other alumni chose to pursue graduate study at UCI or another UC campus. (See Table 7.) Comparative Culture respondents more frequently than others selected a California State University or College campus and Biological Sciences respondents more frequently attended public or private institutions outside California

Current Employment of Graduate Degree Holders

Employment varies by the type and level of degrees UCI graduates hold. The majority of the respondents were employed in one of twelve occupational areas. (See Table 8.)

The areas of employment most frequently reported by those with academic Master's degrees (M.A. or M.S.) were elementary or secondary teaching, engineering, college teaching, and administration. Of those holding academic doctorates, nearly all of the respondents were employed in research or college and university teaching.

Not surprisingly, those holding professional graduate degrees reported a somewhat different employment pattern than the academic degree holders.

TABLE 7.
INSTITUTIONS ATTENDED FOR GRADUATE STUDY BY
UCI UNDERGRADUATE SCHOOL OR PROGRAM

School or Program	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Hum.	ICS	Phys. Sci.	Social Ecology	Social Science	TOTAL
All Respondents	371 100.0	29 100.0	57 100.0	93 100.0	314 100.0	27 100.0	151 100.0	62 100.0	246 100.0	1,350 100.0
UC Irvine	53 14.3	5 17.2	26 45.6	24 25.8	61 19.4	7 25.9	37 24.5	13 21.0	33 13.4	259 19.2
Other UC Campus	93 25.1	5 17.2	5 8.8	12 12.9	56 17.8	7 25.9	41 27.2	8 12.9	45 18.3	272 20.1
Calif. State Univ. and Colleges	47 12.7	10 34.5	6 10.5	17 18.3	69 22.0	4 14.8	22 14.6	12 19.4	49 19.9	236 17.5
Private Institutions in California	45 12.1	1 3.4	9 15.8	16 17.2	51 16.2	5 18.5	13 8.6	15 24.2	50 20.3	205 15.2
All Other Institutions	133 35.8	8 27.6	11 19.3	24 25.8	77 24.5	4 14.8	38 25.2	14 22.6	69 28.0	378 28.0

TABLE 8.
CURRENT EMPLOYMENT OF GRADUATE DEGREE HOLDERS
(BY NUMBER AND PERCENT)

	Admin.	Comp. Sci.	Eng.	Bank- ing	Pub- lishing	Research	College Teach.	Elem.- Second. Teach.	Arts	Law	Lib. Museum Work	Med.	All Other	Total Respondents
Academic	16	5	20	4	4	15	16	24	—	—	—	—	31	135
Masters	11.9	3.7	14.8	3.0	3.0	11.1	11.9	17.8	—	—	—	—	23.0	100.0
Academic	1	—	—	—	—	15	10	—	—	—	—	—	—	26
Doctorate	3.8	—	—	—	—	57.7	38.5	—	—	—	—	—	—	100.0
Professional	10	—	3	3	—	—	4	2	7	—	6	—	22	57
Masters	17.5	—	5.3	5.3	—	—	7.0	3.5	12.3	—	10.5	—	38.6	100.0
Professional	2	—	1	2	—	—	1	—	1	25	—	23	5	60
Doctorate	3.3	—	1.7	3.3	—	—	1.7	—	1.7	41.7	—	38.3	8.3	100.0

The largest percentage of respondents holding professional Master's degree was in administration, followed by the arts, library and museum work, and college teaching. At the doctorate level, the largest percentages were in law (41.7%) and medicine (38.3%).

Employment Prospects After Completion of Graduate Programs

Alumni working toward graduate degrees or credentials were asked to rate their chances of finding a job in the career fields of their choice immediately after completing their programs. On a scale of one to five (very poor to very good), those working on professional degrees in medicine, dentistry, optometry, and veterinary medicine were the most positive about the outlook for employment. Rating their chances as "good" were those pursuing degrees or certificates in business administration, law, social work, public accounting, and medical technology. Possibly reflecting published employment market outlooks, respondents working on Master's or Doctorate degrees in academic disciplines and on teaching credentials were on the average somewhat less positive concerning prospects for employment after completion of their programs.

II. INITIAL FULL-TIME EMPLOYMENT

The Career Experiences Survey questioned UCI graduates on their first full-time jobs obtained subsequent to graduation. In addition to ascertaining the initial occupations most frequently pursued by UCI graduates, the data collected provides information on the following issues:

1. The relationship between success in obtaining jobs in chosen fields and the UCI school or program from which one graduates.
2. The significance of previous part-time and/or summer work in obtaining a job in a chosen field.
3. The relationship between starting salaries and the UCI school or program from which one graduates.

Career or Occupational Fields

Over the ten-year period covered by the survey, UCI graduates reported finding initial full-time jobs in a wide variety of career and/or occupational areas. A total of 1,676 or approximately 70% of all the survey respondents had at least one full-time job since graduating from UCI. Of these, 1,174 (70%) had obtained their first full-time job in one of ten broad career fields after graduating. These fields are discussed below. The figure in parentheses following the occupational headings represents the percentage of the respondents having found initial jobs in that field.

Elementary and Secondary School Teaching (15.0%). The field most frequently reported for initial employment was elementary and secondary

school teaching. Of the 245 respondents obtaining teaching positions, 70% were women, and 30% were men. Forty-six percent were Humanities graduates, 17% were Social Sciences graduates, and the remainder were graduates from each of the other UCI schools and programs. Although teaching has comprised the largest single area of first employment for UCI graduates, the number of graduates finding their first job in teaching has decreased somewhat during the last few years. The percentage of respondents reporting teaching as their first job decreased from 24% in 1969 to approximately 11% in 1973.*

Administration (10.1%). Included in this category are those respondents who secured initial employment as management trainees or administrative interns in business, industry, or government. Of those indicating employment in administrative positions, 31% were Humanities graduates, 27% Social Sciences graduates, and 10% were Biological Sciences graduates.

Clerical and Related Occupations (9.9%). A total of 163 respondents reported initial full-time jobs in clerical or clerically-related occupations. The percentage of those accepting clerical positions has increased from 7.9% in 1969 to 12.7% in 1974. Of those accepting clerical jobs, more than 80% were female. Humanities graduates were the largest percentage (43.9%) to obtain such positions, 37% were Social Sciences or Fine Arts graduates.

*This data bears no necessary relation to the specific experiences of UCI's Teacher Education candidates.

Research (9.1%). Biological Sciences and Physical Sciences graduates accounted for 84% of the 150 respondents initially employed in scientific or medical research. Approximately two-thirds of those graduates entering positions in research were men and one-third were women. Over the period 1972-74, the percentage of those securing positions in research increased from 9% to 14%.

Computer Related Occupations (7.4%). Information and Computer Science (ICS) and Physical Sciences graduates comprised the major portion of those choosing entry-level jobs as computer programmers and systems analysts. Of those securing entry-level jobs in this field, 25% were women, and 75% were men. As a direct reflection of a general increase and demand for computer specialists and the growth of the ICS program at UCI, initial employment in this field increased steadily over the survey period.

Engineering (6.4%). Almost all of those respondents obtaining initial jobs in engineering were graduates of the School of Engineering (74.5%); 17.9% were Physical Sciences graduates.

Merchandising/Marketing/Sales (4.8%). Humanities and Social Sciences graduates comprised nearly 50% of those reporting initial jobs in merchandising management, marketing, and sales. Graduates in Biological Sciences, Fine Arts, and Social Ecology accounted for the other 50%. Of all those entering this field, 43% were women and 57% were men.

Craft or Trade (4.4%). Initial employment by UCI graduates in jobs that can be termed a craft or trade has grown somewhat over the last five years. While only 3.2% of the respondents indicated initial jobs in a craft or trade in 1970, the figure had grown to 8.1% by 1974.

Arts (2.8%). As one could expect, 74% of those finding initial employment in the arts were Fine Arts graduates. Sixty-three percent were women, and 37% were men.

Banking and Finance (2.7%). Of those respondents indicating initial jobs in banking and finance, 41% were Social Sciences graduates and 23% were Humanities graduates. No significant trend toward either an increase or decrease in interest in this field was noted over the survey period. Equal numbers of men and women respondents reported initial employment in banking and finance.

Type of Employing Organization

A definite correlation exists between the undergraduate school or program and the type of organization in which graduates found their first jobs. (See Table 9.) Graduates in Engineering, Information and Computer Science, and Physical Sciences more frequently found initial full-time jobs in business or industry than did those in other schools or programs. Greater than average proportions of Biological Sciences, Social Ecology, Social Sciences, and Engineering graduates were employed by government agencies. Graduates of Humanities, Comparative Culture, and Social Ecology found a greater than average proportion of jobs in education.

TABLE 9.
FIRST FULL TIME JOB - TYPE OF EMPLOYING ORGANIZATION
ALL RESPONDENTS 1966-74
(BY NUMBER AND PERCENT)

	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Hum.	ICS	Phys. Sci.	Soc. Ecol.	Soc. Sci.	Total
Business or Industry	134 48.6	20 46.5	73 77.7	96 57.5	211 47.5	70 86.4	125 67.9	44 47.3	149 50.7	922 55.0
Government Agency	54 19.6	5 11.5	17 18.1	13 7.8	51 11.5	3 3.7	27 14.7	17 18.3	59 20.1	246 14.7
Education*	70 25.4	17 39.5	1 1.1	48 28.7	159 35.8	4 4.9	29 15.8	28 30.1	63 21.4	419 25.0
Self- Employed	14 5.1	1 2.3	3 3.2	10 6.0	12 2.7	1 1.2	3 1.6	2 2.2	18 6.1	64 3.8
Other	4 1.4	0 0	0 0	0 0	11 2.5	3 3.7	0 0	2 2.2	5 1.7	26 1.6
Total	276 16.5	43 2.6	94 5.6	167 10.0	444 26.5	81 4.8	184 11.0	93 5.5	294 17.5	1676 100.0
*Teaching	24	7	—	33	122	—	23	17	43	269
Non-teaching	46	10	1	15	37	4	6	11	20	150

Employment in Chosen Field

Results of the survey indicate that the graduates of certain UCI schools or programs have more success than other UCI graduates in finding jobs in the career fields of their choice. However, over the period under study the percentage of all graduates able to find initial jobs in fields of their choice decreased substantially, reflecting the national trend.

Respondents from Information and Computer Science (93.8%), Engineering (88.3%), and Physical Sciences (61.2%) indicated a higher degree of success in finding jobs in their chosen career field than did all other respondents. (See Table 10.) This is not surprising in part because Engineering and ICS prepare their graduates for specific career fields.

While 61% of all 1970 respondents indicated finding jobs in preferred career fields, the percentage decreased steadily to only 46% by 1974. (See Table 11.) For women graduates the percentage decreased from 57% to 38% over the same period of time.

Significance of Previous Work Experience

Over the period 1967-74, survey respondents reported a significant increase in the importance of part-time or summer work in securing their first job. (See Table 12.) Only 13.3% of the 1969 graduates

TABLE 10.
FIRST JOB IN CHOSEN CAREER FIELD
ALL RESPONDENTS 1966-74

	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Hum.	ICS	Phys. Sci.	Soc. Ecol.	Soc. Sci.	Total
Yes	54.3%	40.5%	88.3%	50.0%	41.8%	93.8%	61.2%	45.2%	49.7%	53.5%
No	36.3	45.2	7.4	42.2	41.3	3.7	24.6	37.6	33.9	33.6
Had Not Chosen A Career Field	9.4	14.3	4.3	7.8	16.9	2.5	14.2	17.2	16.4	12.9

TABLE 11.
FIRST JOB IN CHOSEN CAREER FIELD
FOR 1970-1974 GRADUATES

	1974	1973	1972	1971	1970
Yes	45.5%	51.2%	49.4%	56.3%	60.9%
Females	38.5	51.0	44.9	53.2	57.4
Males	51.9	51.4	52.8	59.8	63.7
No	40.9	36.4	34.9	29.8	30.0
Females	49.7	37.3	37.7	33.3	34.0
Males	33.1	35.7	32.8	25.8	26.5
Had Not Chosen A Career Field	13.5	12.4	15.7	13.9	9.2
Females	11.9	11.8	17.4	13.5	8.5
Males	15.0	13.0	14.4	14.4	9.7

TABLE 12.
CONTRIBUTION OF PART-TIME OR SUMMER WORK EXPERIENCE
IN FINDING FULL-TIME EMPLOYMENT AFTER GRADUATION

	1974	1973	1972	1971	1970	1969
Not at All	28.9%	42.6%	39.3%	35.3%	51.6%	53.3%
Slightly	12.5	9.5	15.4	12.9	10.8	8.0
Neutral	6.3	12.0	9.4	15.3	9.7	14.7
Partially	11.7	11.4	11.1	7.1	7.5	4.0
Directly	32.0	20.9	17.9	17.6	15.1	9.3
No Work Experience	8.6	3.8	6.8	11.8	5.4	10.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE 13.
AVERAGE ANNUAL STARTING SALARIES
BY SCHOOL OR PROGRAM 1970-1974

School or Program	1974	1973	1972	1971	1970
Bio. Sci. (No. of Respondents)*	\$8,200 (57)	\$8,000 (53)	\$7,800 (43)	\$8,200 (32)	\$7,200 (26)
Humanities	6,400 (55)	6,600 (76)	7,200 (64)	6,800 (52)	7,000 (77)
Soc. Sci.	6,500 (37)	7,900 (54)	8,100 (54)	7,700 (40)	9,000 (41)
Fine Arts	7,400 (24)	5,900 (28)	6,500 (31)	7,000 (26)	
Phys. Sci.	9,400 (26)	9,800 (40)	8,300 (38)		
I.C.S.	11,400 (20)	11,200 (28)			
Soc. Ecol.	7,400 (41)				

*Caution: Estimates of average salaries based on fewer than 30 responses are more likely to be less representative of the actual mean.

reported that prior work experience was either partially or directly responsible for success in obtaining their first full-time job after graduation. A dramatic increase to 43.7% was indicated by the 1974 graduates.

By school or program, graduates in Social Ecology placed the greatest importance on work experience in finding initial employment. Information and Computer Science, Physical Sciences, and Comparative Culture graduates also attributed substantial importance to prior work. Biological Sciences, Humanities, and Fine Arts graduates placed less value on previous part-time or summer work in finding their first full-time job; graduates of these programs however reported less relevance of their undergraduate major to their occupation.

Starting Salaries

The results of the Career Experience Survey indicate that the graduates of certain UCI schools or programs were able to command higher starting salaries than other UCI graduates. The findings indicate that the average starting salaries were highest for the graduates from those UCI schools and programs that lead most directly to specific fields of career employment, such as Information and Computer Science and Engineering. Table 13 shows the average annual starting salaries for all respondents having had full-time jobs after graduation from 1970 to 1974 for those schools and programs where the data was sufficient to report.

III. CURRENT EMPLOYMENT

The current employment situation of UCI graduates at the time of the survey indicates the variety of career and occupational fields being pursued by the respondents. It also provides answers to several questions:

1. Where and in what kinds of organizations are UCI graduates most often employed?
2. How do salaries for recent UCI graduates compare with the national average and by how much do salaries received by graduates from different UCI schools and programs differ?
3. Are UCI graduates currently employed in career fields of their choice and to what extent does this differ by undergraduate school or program? How do their present occupations compare to their aspirations?
4. Is there any relationship between undergraduate education and current job satisfaction?
5. Were the graduates of some UCI schools or programs more likely than others to consider their undergraduate education relevant to their employment at the time of the survey?
6. What notable undergraduate experiences do the respondents feel were of particular value to their careers?

Career or Occupational Fields

At the time of the survey, 1,657 (63%) of the respondents reported they were employed. Of these, 47% were women and 53% were men. A total of 138 (5.8%) indicated they were seeking employment.

Over 80% of the respondents held positions in one of twelve career or occupational fields. When analyzing the relative composition of each

field, however, it should be kept in mind that a large number of the respondents were still pursuing graduate study at the time of the survey and had not yet entered the employment market.

Elementary and Secondary School Teaching (17.0%). Of all the respondents, 257 reported they were employed as elementary or secondary school teachers, which represents approximately two-thirds of all those holding teaching credentials at the time of the survey. Humanities, Social Sciences, and Fine Arts graduates comprised the largest percentage of those teaching. Eleven percent had earned Master's degrees in addition to one or more credentials. Seventy percent were women and 30% were men.

Administration (10.7%). Of the 162 respondents who were employed in administrative positions in business, industry, government, and education, 70% were Humanities, Social Sciences, or Biological Sciences graduates, and 17% held Master's degrees. Thirty-seven percent were women and 63% were men.

Research (7.8%). Graduates in Biological Sciences and in Physical Sciences accounted for over 80% of all those employed in research. Of these respondents, 34% held graduate degrees: 21% held Master's degrees and 13% held doctorates. Forty-three percent were women and 57% were men.

Computer Specializations (7.6%). More than 50% of those employed as computer programmers or systems analysts were Information and Computer

Science graduates and 33% were Physical Sciences graduates. One-quarter of those employed in this field were women and three-quarters were men.

Engineering (6.7%). Of the 102 respondents employed as engineers, 71% had received Bachelor's degrees in Engineering and 21% were Physical Sciences graduates. Twenty-three percent held Master's degrees and 2% doctorates. Three of the respondents employed as engineers were women.

Clerical and Related Fields (5.4%). Humanities, Fine Arts, and Social Sciences graduates comprised the largest portion of those respondents employed in clerical positions. Eighty-seven percent of these respondents were women and 13% were men.

Marketing/Sales (4.4%). Graduates from each UCI school or program except Engineering were employed in marketing or as merchandise managers, buyers, sales managers, or representatives. Of these respondents, 45% were women and 55% were men. A small percentage (4.5%) held Master's degrees.

Arts (3.5%). Seventy-two percent of those employed in various fields of the arts (music, drama, decorating, commercial design) were Fine Arts graduates and 13% held professional Master's degrees.

Crafts or Trades (3.3%). Humanities, Biological Sciences, and Social Sciences graduates comprised the largest portion of those respondents employed in a craft or a trade.

College or University Teaching (2.5%). Of the 28 respondents employed as college or university teachers, 26% were Humanities graduates, 26% were Biological Sciences graduates, 18% were Social Sciences graduates, and 16% were Fine Arts graduates. All of those employed as college or university teachers held graduate degrees: 71% held Master's degrees and 29% doctorates.

Banking and Finance (2.4%). Of the 36 graduates employed in banking or finance, 53% were Social Sciences graduates. Occupational titles reported in this area included financial analyst, banker, investment counselor, and certified public accountant. One-quarter of all those employed in banking or finance held graduate degrees: 19% held Master's degrees and 6% doctorates. Of those employed in banking or finance, 58% were men and 42% were women.

Medical Support Services (2.3%). This category of employment includes such positions as medical technologist, nurse, and X-Ray technician. Of the 35 respondents employed in this field, 63% were Biological Sciences graduates. Eleven percent of those employed held Master's degrees and none held doctorates.

Law (1.9%). Of those respondents practicing law at the time of the survey, 55% were Humanities graduates and 35% were Social Sciences graduates. Ten percent of those practicing law were women and 90% were men.

Medical Professions (1.9%). Twenty-nine graduates employed at the time of the survey were practicing medicine or dentistry. Of these, 83% were Biological Sciences graduates. Seven percent practicing medicine or dentistry were women and 93% were men.

Location and Type of Employer

More than one-third (38%) of all the employed respondents held positions in Orange County near the campus in cities such as Irvine, Newport Beach, Costa Mesa, and Santa Ana. Of the remainder, employment locations included other areas of Orange County (6%), Los Angeles (15%), San Francisco (7%), South Bay-L.A. Harbor (4%), San Gabriel Valley (4%), San Diego (4%), and all other regions (22%).

More than one-half of all respondents were employed in private business or industry. Engineering, ICS, and Physical Sciences graduates as a group were most frequently employed in private business and industry; graduates in Fine Arts, Humanities, and Social Ecology were more frequently in education than were other graduates; and Social Ecology and Social Sciences graduates more frequently were employed in government than were other graduates. (See Table 14.)

TABLE 14.
CURRENT JOB - TYPE OF EMPLOYING ORGANIZATION
ALL RESPONDENTS 1966-74

	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Hum.	ICS	Phys. Sci.	Soc. Ecol.	Soc. Sci.	Total
Business or Industry	117 48.5	15 48.4	69 79.3	81 50.0	169 42.7	69 85.2	118 68.2	34 40.5	120 44.0	792 51.8
Government Agency	44 18.3	5 16.1	16 18.4	9 5.6	49 12.4	4 4.9	24 13.9	17 20.2	61 22.3	229 15.0
Education*	64 26.6	9 29.0	2 2.3	52 32.1	156 39.4	5 6.2	28 16.2	30 35.7	77 28.2	423 27.7
Self - Employed	15 6.2	1 3.2		20 12.3	15 3.8	1 1.2	1 .6	2 2.4	14 5.1	69 4.5
Other	1 .4	1 3.2			7 1.8	2 2.5	2 1.2	1 1.2	1 .4	15 1.0
Total	241 100.0	31 100.0	87 100.0	162 100.0	396 100.0	81 100.0	173 100.0	84 100.0	273 100.0	1528 100.0
*Teaching	26	9	1	39	124		21	20	55	295
Non-teaching	38		1	27	32	5	7	10	22	128

Current Annual Salaries

Results of the survey indicate that current salaries of graduates of certain UCI schools and programs differed substantially from other UCI graduates. (See Table 15.) These differences were most apparent for recent graduates, with 1974 Engineering and Information and Computer Science graduates earning significantly higher salaries than other graduates. At the same time, the data indicates that the vast majority of graduates of all schools and programs have experienced salary gains in each successive year since graduation, and one-third of all 1969 respondents were earning annual salaries in excess of \$15,000.

CURRENT ANNUAL SALARY RANGES BY YEAR OF GRADUATION

<u>Salary Range</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
Less than \$12,000	33.9%	51.4%	56.5%	62.3%	63.4%	79.2%
\$12,000-\$15,000	33.0	25.2	28.7	25.0	27.6	30.7
More than \$15,000	33.1	23.4	14.8	12.7	9.0	6.3

From a national standpoint, recent UCI graduates fair about equally to other college and university graduates. Shown below is a comparison of the average salaries of 1974 UCI graduates at the time of the survey and the national average salaries offered to Bachelor's degree graduates as reported by the College Placement Council.⁽²⁾

⁽²⁾ College Placement Council, Salary Survey, July, 1975

TABLE 15.
AVERAGE ANNUAL SALARY BY SCHOOL OR PROGRAM*
1969-1974

School or Program	1969	1970	1971	1972	1973	1974
Bio. Sci.	\$15,800	\$13,500	\$12,800	\$10,300	\$10,200	\$ 9,900
(No. of Respondents)**	(25)	(24)	(20)	(28)	(42)	(38)
Engineering	20,800	19,000	15,000	16,000	14,200	13,000
	(13)	(7)	(9)	(16)	(19)	(15)
Fine Arts	10,500	12,400	7,900	8,700	10,100	7,400
	(14)	(8)	(20)	(19)	(16)	(16)
Humanities	13,400	11,422	10,800	10,300	9,300	8,300
	(53)	(59)	(45)	(51)	(55)	(40)
Phys. Sci.	16,400	14,700	15,500	13,300	12,100	10,100
	(18)	(19)	(18)	(36)	(29)	(22)
Soc. Sci.	15,100	14,100	11,900	11,900	9,900	8,600
	(28)	(32)	(37)	(44)	(42)	(21)
I.C.S.			13,600	15,700	15,100	12,300
			(6)	(20)	(26)	(20)
Comp. Cult.				9,600	8,700	6,000
				(7)	(7)	(4)
Soc. Ecol.				8,300	9,900	8,500
				(11)	(15)	(29)
Years from Graduation	6	5	4	3	2	1

*For respondents whose primary activity is working.

**Caution: Estimates of mean salaries based on fewer than 30 cases are more likely to be less representative of the actual mean.

	<u>CPC Survey</u>	<u>UCI Survey</u>
Humanities	\$ 8,676	\$ 8,300
Social Science	9,240	8,600
Engineering	12,768	13,000
Biological Sciences	9,264	9,900
Computer Science	11,700	12,300
Physical Sciences	11,100	10,100

Those respondents employed at the time of the survey in engineering, computer science, law, and medicine were commanding generally higher salaries than those in other career fields. (See Table 16.) However, due to the relatively small number of respondents reporting salaries in each field, caution should be used in drawing conclusions based on this data.

Employment in Chosen Field

Seventy-one percent of the employed respondents indicated they held positions in the career fields of their choice. The percentage of respondents who reported having current positions in their chosen fields increased markedly over those reporting initial employment in their chosen fields. Significant differences in this reporting appeared among the graduates of different schools and programs. (See Table 17.) While over 90% of the Information and Computer Science and Engineering graduates reported employment in their chosen field, the percentages for most other schools ranged from 60% to 80%. Of the few Comparative Culture graduates who responded only one-half said they were working in their preferred field.

TABLE 16.
AVERAGE ANNUAL SALARY BY CAREER OR OCCUPATIONAL AREA
FOR GRADUATES 1969-74

Career or Occupational Area	1969	1970	1971	1972	1973	1974	Total Number Currently Employed
Elementary and Secondary School Teaching	\$11,000	\$11,500	\$10,800	\$10,100	\$ 9,900	\$ 7,000	257 17.0
Administration	15,600	13,200	14,000	14,700	10,400	10,300	162 10.7
Research	14,400	12,300	11,400	10,500	9,900	9,500	118 7.8
Computer Specializations	16,500	16,900	13,700	14,700	14,000	12,200	115 7.6
Engineering	20,500	19,000	15,000	15,000	14,100	12,600	102 6.7
Clerical/Secretarial	8,700	10,600	NA	7,400	10,400	6,200	82 5.4
Marketing/Sales	NA	15,800	10,800	11,700	10,000	8,600	66 4.4
Arts	NA	8,900	6,900	6,300	5,400	8,200	53 3.5
Craft or Trade	11,200	NA	11,000	8,600	9,400	7,500	50 3.3
College Teaching	12,500	11,100	10,500	NA	NA	NA	38 2.5
Banking & Finance	NA	15,100	13,300	12,900	11,000	6,300	36 2.4
Medical Support Services	11,800	13,600	12,400	10,300	12,700	8,300	35 2.3
Law	21,500	16,600	13,900	13,500	NA	NA	29 1.9
Medicine/Dentistry	17,100	NA	NA	NA	NA	NA	29 1.9

TABLE 17.
CURRENT JOB - IN PREFERRED CAREER FIELD
ALL RESPONDENTS 1966-74

	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Human.	ICS	Phys. Sci.	Soc. Sci.	Soc. Ecol.	Total
Currently Working in Preferred Career Field	68.4%	50.0%	92.7%	62.4%	64.5%	94.9%	80.4%	62.4%	69.7%	70.5%
Currently Not Working in Preferred Career Field	31.6%	50.0%	7.3%	37.6%	35.5%	5.1%	19.6%	37.6%	30.3%	29.5%

Job Satisfaction

Based upon the fact that survey data shows significant differences between undergraduate schools and programs in areas such as current salary, employment, and fields of choice, an assumption could be mistakenly made that the data would also show significant differences in response to the questions regarding job satisfaction. When asked to rate job satisfaction on a scale of one to five (very dissatisfied to very satisfied), no significant difference appeared among the respondents of the several schools and programs. The mean or average response to the question was 3.7.

Relevance of Undergraduate Education to Job

On a scale of one to five (not related to closely related), graduates of Information and Computer Science, Engineering, and Physical Sciences reported the greatest overall relationship between their undergraduate education and their present employment. Graduates from Comparative Culture, Humanities, Fine Arts, and Social Sciences reported a somewhat lesser degree of relationship. Graduates in Social Ecology and Biological Sciences indicated some relationship between undergraduate education and their current employment, with a mean response of 3.0.

Job Performance Without College Education

From an overall standpoint, a majority of respondents indicated they would perform poorly in their current positions without their college

education. On a scale of one to five (very poorly to very well), the mean response for all respondents was 2.6. By school and program, Engineering, Physical Sciences, and Biological Sciences graduates indicated the least ability to perform in their current jobs without their education. Of all the respondents, those in Fine Arts indicated the least relationship between their college education and current job performance.

Notable Undergraduate Career-Related Experiences

Survey respondents were asked to comment on any experiences during their undergraduate education at UCI that were of particular value in their careers. Although a wide variety of comments were given, the majority focused on academics, faculty, field study, interaction with fellow students, and extracurricular activities.

Mentioned most frequently were experiences related to academics in general and to specific course work. Respondents cited the opportunity for interdisciplinary study, practical laboratory experience, independent study, program flexibility, training in problem solving, exposure to a broad-based education, and general academic excellence.

Mentioned almost as frequently as academics were benefits derived from having studied with particular faculty members and from the relationships developed with faculty.

The opportunities for field study and out-of-class work experiences were the third most frequently listed factors. Many mentioned that field study as well as other kinds of outside work experience had been either partially or directly responsible for their success in finding career-related positions after graduation.

Interaction with fellow students and participation in extracurricular activities on campus were the fourth most often mentioned experiences to have been of particular value in graduates' present careers. A number of respondents specifically mentioned participation in student government, orientation programs, and student organizations.

IV. ANALYSES OF RESPONSES ACCORDING TO SCHOOL OR PROGRAM

In the first three sections of this report, an overview of the career experiences of all the survey respondents as a group is presented. This section will analyze the responses of the graduates by school and program. These analyses briefly examine the distinctive features of each school's graduates and are not meant to be comprehensive studies.

School of Biological Sciences

The School of Biological Sciences subgroup was composed of 519 respondents, accounting for 45% of all graduates of that school over the survey period. Approximately one-quarter of the respondents were women and three-quarters were men.

Educational Attainment

Of all the survey respondents, Biological Sciences graduates had the strongest professional and academic orientation. At the time of the survey, 56% were working toward a graduate degree or credential and 32% had already earned one.

As indicated in the table that follows, the degree most frequently pursued by the Biological Sciences graduate was the M.D. degree: 22.3% of the respondents were either pursuing or had earned a medical doctorate. Of the remaining respondents, a large number had chosen to

pursue academic Master's or doctorate degrees in biological or health sciences.

<u>Degree/Credential</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
Credential	15.8%	6.2%	22.0%
M.A./M.S.	7.0	8.7	15.7
Ph.D.	2.3	11.1	13.4
M.D.	4.3	18.0	22.3
DDS/OD	1.7	4.2	5.9
Other	<u>.9</u>	<u>7.9</u>	<u>8.8</u>
TOTAL	32.0%	56.1%	88.1%

Initial Employment

Of all Biological Sciences respondents, 271 (52.9%) reported having had at least one full-time job since graduation. Of these, approximately three-quarters found their first full-time job in one of five occupational areas: research (35%), business or administration (16%), medical or health support services (10%), elementary or secondary school teaching (7%), and medicine (7%).

By type of employer, 49% found their first job in private business or industry, 25% in education (two-thirds in non-teaching jobs), 20% in government agencies, and 5% were self-employed.

In terms of finding initial employment in fields of their choice, Biological Science graduates fared about equally with all the respondents, with 54% indicating initial positions in chosen occupational areas.

Current Employment

A total of 235 (45.9%) of the Biological Sciences respondents reported they were employed at the time of the survey. Forty-one percent indicated they were seeking employment. As was the case in initial employment, the majority of employed respondents held positions in scientific research (29%); medicine, including M.D.s working as interns and residents, dentistry and optometry (10%); medical and health support services (9%); business and administration (14%); and elementary and secondary school teaching (7%).

By type of employer, 49% of the respondents were in private business or industry, 27% in education (only 10% as teachers), 18% in government agencies, and 6.2% were self-employed. Over two-thirds (68%) said they were working in career fields of their choice.

Comparison of Planned and Obtained Occupations

Since a large number of recent Biological Sciences graduates were still in training for their careers at the time of the survey, the responses of an earlier class, 1970, were isolated to obtain a representative

analysis of planned and obtained occupations. While 59% of the 1975 Biological Sciences freshman class aspires to become medical professionals, 29% of the class of 1970 has obtained that objective.⁽³⁾ Ten percent of the 1975 class aspires to work in scientific research and 29% of the 1970 class are working in that field. Sixteen percent of the 1975 class aspires to jobs in medical support services and 7% of the 1970 class has obtained them. Only 1% of the 1975 class aspires to become elementary or secondary school teachers and 11% of the 1970 class are working as teachers.

Program in Comparative Culture

The Program in Comparative Culture subgroup was composed of 58 respondents, representing 28% of all the graduates in this program over the survey period and comprising the smallest single group of respondents. Approximately two-thirds of the respondents were women and one-third were men.

Educational Attainment

As shown below, over one-half of the respondents either held or were pursuing a graduate degree or credential. Of these, the largest group had chosen to pursue an academic Master's degree in either social sciences or humanities subject areas. Doctorates were being pursued by 8.6% of the respondents, teaching credentials by 7%, and law degrees by 5.1%.

(3) Cooperative Institutional Research Program conducted by the American Council on Education and UCLA, 1975.

<u>Degree/Credential</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
Teaching Credential		7.0%	7.0%
M.A./M.S.	12.1%	17.2	29.3
MSW		1.7	1.7
Ph.D./Ed.D.		8.6	8.6
J.D.	<u>1.7</u>	<u>3.4</u>	<u>5.1</u>
TOTAL	13.8%	37.9%	51.7%

Initial Employment

Of the Comparative Culture respondents, 42 (72%) had held at least one full-time job since graduation. Forty-one percent said their initial full-time job had been in the career field of their choice, somewhat less than the average for all respondents (53.5%).

Comparative Culture graduates found initial employment in a wide variety of career fields. Those areas most frequently mentioned were clerical (19%), elementary and secondary school teaching (16.7%), administration (16.7%), marketing, sales and merchandising (7.1%), educational support services (7.1%), and legal support services (4.8%).

By type of employer, a less than average percentage (47%) found positions in private business or industry, a greater than average percentage (40%) found jobs in education, and 12% found positions in government.

Current Employment

At the time of the survey, slightly over one-half of the respondents (31) reported they were employed. A greater than average percentage (14%) indicated they were looking for employment. Of those employed, three-quarters were working full time.

By career or occupational area, the largest single percentage (29%) were teaching at the elementary or secondary level; 16.1% were in general management or administrative positions; 9.7% were in marketing, sales or merchandising; 9.7% were in clerical jobs; and 6.5% held positions in publishing.

By employer type, less than one-half (48%) were currently employed in private business or industry, nearly one-third (29%) were in education working as teachers, and 16% were employed in government agencies. Although more of those respondents currently employed were in career fields of their choice (50%), the percentage fell substantially under that for all other respondents.

School of Engineering

The School of Engineering subgroup was composed of 105 respondents which accounts for 28% of all graduates in the school over the survey period. Of all respondents, 97% were men and 3% were women.

Educational Attainment

Over one-half of the engineering graduate respondents had chosen to pursue graduate degrees. The majority of these respondents either held or were working toward graduate degrees in engineering, however, a number of graduates were pursuing degrees in other fields including administration, accounting, public health, health sciences, and law.

<u>Degree</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
Master's in Engineering	16.3%	13.5%	29.8%
Master's-other field	5.8	8.7	14.5
Doctorate	--	<u>6.7</u>	<u>6.7</u>
TOTAL	22.1%	28.9%	51.0%

Initial Employment

The most outstanding career-related characteristic of all engineering graduates was their ability to obtain career-related employment after completion of the Bachelor's degree: 88% found initial jobs in the career field of their choice. In addition, it took the engineering graduates less time than other graduates to obtain their first job, with the average graduate spending only one and one-half months looking for a position.

Current Employment

At the time of the survey, 85 respondents (34%) were employed in full-time jobs. Eighty-three percent of these were employed as engineers, with the remainder in research, college or university teaching, and administration; 79% were in private business or industry (second only to Information and Computer Science respondents at 85%); 18% were in government agencies; and 2% were in education.

More than 90% were working in their chosen field and three-quarters were working for the same employer with whom they had first started working. Only 2% reported they were looking for employment at the time of the survey.

Finally, engineering graduates were earning average annual salaries higher than those of other graduates at the time of the survey. They reported a strong relationship between their undergraduate UCI education and their current job, and indicated the least ability of all respondents to perform in their jobs without their education.

School of Fine Arts

The School of Fine Arts subgroup was composed of 279 respondents, representing 42% of all Fine Arts graduates over the survey period. Of all UCI schools and programs, Fine Arts had the highest number of women respondents (73.8%).

Educational Attainment

Compared to all the other schools and programs, Fine Arts had the largest percentage of respondents who had chosen to pursue a professional Master's degree. Of these, almost all were in an MFA program.

Over one-fourth of the respondents held teaching credentials, while a relatively small number held or were pursuing a doctorate degree.

<u>Degree/Credential</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
Teaching Credential	25.3%	1.9%	27.2%
Academic Master's	2.6	7.1	9.7
Professional Master's	6.3	7.1	13.4
Doctorate	<u>.7</u>	<u>2.2</u>	<u>2.9</u>
TOTAL	34.9	18.3	53.2

Initial Employment

Of the 152 respondents reporting they had obtained at least one full-time job since graduating, the largest single portion (20%) found positions in some field of the arts including commercial art, design, graphics, painting, theatre, dance, and textiles. Seventeen percent had found full-time elementary or secondary school teaching positions, 16% obtained clerical or secretarial work, 13% found jobs in sales or merchandising, and 5% in management or administrative training programs.

One-half of the Fine Arts respondents said their initial full-time jobs were in the career field of their choice which is a more favorable response rate than indicated by graduates from Comparative Culture, Humanities, and Social Ecology. In locating initial employment, the Fine Arts respondents reported spending an average of 2.6 months, somewhat longer than the average for all UCI graduates responding to this survey.

Current Employment

At the time of the survey, 159 of the respondents were employed. Of these, approximately three-quarters were employed full time and one-quarter employed part time. A relatively large number (13.7%) indicated they were seeking employment.

Of those employed graduates, approximately the same proportions were working in one of the same five occupational fields in which they had obtained initial employment. Slightly larger numbers, however, were employed in art-related positions (24%) and in teaching (21%), and fewer were employed in clerical positions and in sales and merchandising. Of all the respondents, 65% said they were working in careers of their choice.

Compared with the graduates of all other UCI schools and programs, the percentage of Fine Arts respondents who were self-employed was nearly three times as large. While 4.5% of all respondents reported

they were self-employed, 12.3% of the Fine Arts respondents reported self-employment.

School of Humanities

The School of Humanities subgroup was composed of 615 respondents, accounting for 38% of all graduates in Humanities over the survey period and comprising the largest single group of survey respondents. Approximately two-thirds of the respondents were women and one-third were men.

Educational Attainment

As the following chart indicates, a large number of Humanities graduates (31%) had elected to pursue careers in teaching for which a credential is required. Another large group (26.9%) elected to pursue a Master's and/or doctorate in an academic field, primarily in Humanities subject areas, while approximately 6% chose to earn professional Master's degrees in fields including library science, social work, fine arts, and business administration. Humanities graduates comprised the largest group of graduates electing to pursue law degrees, accounting for approximately 40% of all respondents either having earned or currently pursuing a J.D.

<u>Degree/Credential</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
Teaching Credential	30.5%	.5%	31.0%
M.A./M.S.	9.6	10.9	20.5
Professional Master's	2.3	3.6	5.9
J.D.	2.8	5.6	8.4
Ph.D.	.3	6.1	6.4
Other	<u>5.8</u>	<u>.2</u>	<u>6.0</u>
TOTAL	51.3%	26.9%	78.2%

Initial Employment

Of all the Humanities respondents, 438 (72.6%) reported having had at least one full-time job since graduating. Humanities graduates, like those in Social Sciences and Comparative Culture, found initial jobs in a wide variety of career or occupational fields. Elementary and secondary school teaching (26.3%) comprised the largest single area of initial employment; next were clerical positions (16.4%); management or administrative training jobs (10.3%); sales, marketing or merchandising (5.7%); craft or trade positions (3.9%); and insurance (3.7%).

By employer type, 48% found jobs in private business or industry, 12% in government, and a greater than average percentage (36%) in education.

Current Employment

A total of 394 (65.3%) of the respondents reported they were employed at the time of the survey. Eighty-six percent were employed full time. As was the case for initial employment, Humanities graduates were currently working in a large number of different career or occupational areas. Nearly one-third (28.9%) were employed as elementary or secondary teachers, 13.5% were in management or administrative positions, 8.9% were in clerical jobs, 4.1% were practicing law, and another 4% were in marketing, sales or merchandising. Other occupational areas included social services, college teaching, library science, educational support services, finance and banking, and publishing.

Of those working at the time of the survey, 65% said they were in the career field of their choice. Initially, only 41% reported jobs in their chosen field.

Department of Information and Computer Science

The Department of Information and Computer Science (ICS) subgroup was composed of 94 respondents, accounting for 58% of all graduates in the department over the survey period. Of all the respondents, 84% were men and 16% were women.

Educational Attainment

Presumably due to the extremely favorable prospects for employment for the ICS graduate at the Bachelor's degree level, a relatively small portion of ICS respondents reported the pursuit of graduate study at the time of the survey. Of those electing to pursue graduate study, almost all either held or were working toward a Master's or doctorate in computer science. Business and administration were the second most frequently chosen fields of study.

<u>Degree/Credential</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
M.A./M.S.	7.4%	11.7%	19.1%
M.B.A.	1.1	3.2	4.3
J.D.		1.1	1.1
Ph.D.	—	<u>4.3</u>	<u>4.3</u>
TOTAL	8.5%	20.3%	28.8%

Initial Employment

Nearly all the ICS respondents (85%) had obtained at least one full-time job at the time of the survey.

As reported earlier, the survey results indicate that the ability of ICS graduates to obtain career-related employment after completion of the Bachelor's degree is high. Of all the survey respondents, ICS

graduates reported the greatest success in finding initial employment in their chosen field (94%).

By career or occupational field, over three-quarters (77.5%) found positions in computer specializations, most frequently as computer programmers. The majority of the remainder found positions in administration, marketing and sales. By employer type, almost all (86%) found their first job in private business or industry.

Current Employment

At the time of the survey, 85% of the ICS respondents were employed, and nearly all were working in full-time jobs. Only 2.1% said they were seeking employment. Seventy-five percent were employed in computer specializations, 5% were in positions in management or administration, and 6% were in marketing or sales. Of all those employed respondents, 95% said they were in the field of their choice, and two-thirds indicated they were working for the same employer for whom they worked initially.

ICS respondents, like those in Engineering, reported a strong relationship between their UCI undergraduate education and their current job. They also indicated, as did the engineering graduates, a low ability to perform in their jobs without their college education.

School of Physical Sciences

The School of Physical Sciences subgroup was composed of 264 respondents, representing 45% of all Physical Sciences graduates over the survey period. Three-quarters of all the respondents were men and 23% held dual degrees.

Educational Attainment

In terms of academic orientation, 40.9% of the Physical Sciences respondents were enrolled in graduate programs at the time of the survey, which was second only to graduates from Biological Sciences. Compared with all other UCI schools and programs, Physical Sciences had the largest percentage of graduates who had chosen to pursue academic doctorates: 20% of all the respondents were either holding or pursuing a Ph.D. While the majority of respondents had chosen to pursue graduate study in one of the physical sciences, others were either pursuing or held degrees in biological sciences, business, administration, medicine, and engineering.

<u>Degree/Credential</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
Teaching Credential	8.8%	3.8%	12.6%
M.A./M.S.	10.3	10.3	20.6
Professional Master's	1.1	2.3	3.4
Ph.D.	3.5	16.5	20.0
M.D.	1.0	2.7	3.7
Other Doctorate	1.0	3.1	4.1
Other Degree	-	2.2	2.2
TOTAL	40.9%	25.7%	66.6%

Initial Employment

Of all the respondents, 185 (71%) reported having had at least one full-time job since graduating. Approximately two-thirds found initial employment in one of five occupational areas: computer programming (22.2%); research (17.8%); engineering (10.3%); elementary or secondary school teaching (10.3%); and administration (7.0%).

A somewhat greater than average proportion of Physical Sciences respondents (61.2%) reported that their first full-time job after graduation was in the career field of their choice.

Current Employment

At the time of the survey, a total of 173 (66.3%) of the respondents were currently employed; 161 were working full time. A relatively small portion (3.1%) reported they were seeking employment.

Of those employed Physical Sciences graduates, approximately the same proportions were working in one of the same five major occupational fields in which they had obtained initial employment, and a relatively large percentage (65.9%) were still working for the same employer. By occupation, 22% were working as computer programmers or systems analysts; 12.1% were engineers; 10.4% were elementary or secondary school teachers; and 9.2% were in management or administrative positions.

By employer type, 68.2% were employed in private business or industry, 16.2% were in education, and 13.9% were in government agencies. More than 80% said they were employed in the career field of their choice.

School of Social Sciences

The School of Social Sciences subgroup was composed of 405 respondents, representing 42% of all Social Sciences graduates over the survey period. Of the respondents, 41% were women and 59% were men.

Educational Attainment

As indicated in the following table, approximately one-fifth of the respondents had completed or were pursuing a Master's degree in an academic field at the time of the survey. More than 12% had chosen to obtain a Ph.D. The fields of study most often chosen by those holding or pursuing academic Master's or doctorates included administration, psychology, and other social science fields. Business, public administration, urban planning, and education were the fields selected by those choosing to pursue a professional Master's degree.

<u>Degree/Credential</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
Teaching Credential	17.3%	.2%	17.5%
M.A./M.S.	9.9	11.9	21.8
Professional Master's	5.6	4.8	10.4
J.D.	3.6	8.6	12.2
Ph.D.	1.0	6.6	7.6
Other	<u>.5</u>	<u>.5</u>	<u>1.0</u>
TOTAL	37.9%	32.6%	70.5%

Initial Employment

Of all the respondents, 289 (73.4%) said they had obtained at least one full-time position since graduating. Of these, approximately one-half indicated the job had been in the career field of their choice. Social Sciences graduates, like Humanities and Comparative Culture graduates, found initial as well as current employment in a wide variety of occupational areas.

Elementary and secondary school teaching (14.9%) followed by general management or administration (13.5%) proved to be the two single largest areas of initial employment for Social Sciences graduates. Other employment areas reported by the respondents include clerical (12.1%), finance and banking (6.2%), trades or crafts (5.5%), marketing, sales or merchandising (4.8%), computer science (4.2%), and social service (3.5%).

By employer type, approximately one-half of the respondents found initial jobs in private business or industry, 20% in government, and 21% in education. Six percent indicated self-employment as their initial type of employment. Compared with other UCI schools and programs, Social Sciences had the largest percentage of respondents finding their first job in government.

Current Employment

At the time of the survey, a total of 268 (68%) Social Sciences respondents were employed. Of these, 234 were working full time and 4.7% reported they were looking for employment.

By career or occupational area, elementary and secondary school teaching and managerial and administrative occupations accounted for the largest percentages of currently employed Social Sciences graduates. As compared with their initial employment, more graduates reported current employment in banking and finance, law, college teaching, and merchandising while fewer were employed in clerical, trade, and craft jobs.

By employer type, 44% held positions in private business or industry, 22.3% in government, 28.2% in education, and 5.1% were self-employed. Compared to all other respondents, Social Sciences had the greatest percentage of graduates employed in the government sector. In terms of career choice, approximately 62% reported they were currently employed in fields of their choice.

Program in Social Ecology

The Program in Social Ecology subgroup, composed of 140 respondents, represented 56% of all the graduates from this program over the survey period. Approximately two-thirds of the respondents were women and one-third were men.

Educational Attainment

A total of 61 (43.6%) respondents either held or were pursuing at least one graduate degree or credential at the time of the survey. As the following chart indicates, the largest percentage had chosen to pursue an M.A. or M.S.; 8% were pursuing law degrees; 5.3% held or were pursuing an academic doctorate; and 2.9% were working toward an M.B.A. or M.P.A. degree. Of those electing to pursue either an academic Master's or doctorate degree, the majority had chosen psychology or other social sciences subjects as fields of study.

<u>Degree/Credential</u>	<u>Held</u>	<u>Pursuing</u>	<u>Total</u>
Teaching Credential		3.6%	3.6%
M.A./M.S.	4.3	14.3	18.6
M.B.A./M.P.A.		2.9	2.9
Ph.D.	1.0	4.3	5.3
J.D.		7.9	7.9
D.V.M./O.D.		1.4	1.4
Other	—	<u>3.6</u>	<u>3.6</u>
TOTAL	5.3%	38.0%	43.3%

Initial Employment

Of all the respondents, 91 (65%) had held at least one full-time job after graduation. Of these, over one-half had obtained initial positions in elementary or secondary school teaching (18.7%), management or

administrative training programs (14.3%), marketing, sales or merchandising (11.0%), counseling (6.6%), or clerical jobs (6.6%).

Of all UCI schools and programs, the graduates in Social Ecology placed the greatest importance on previous part-time or summer work (including field study) in obtaining their first job after graduation. Forty-five percent of the respondents in Social Ecology reported finding initial jobs in the career field of their choice.

Current Employment

A total of 85 (61%) of the Social Ecology respondents reported they were employed at the time of the survey. Of these, however, one-quarter were employed part time. By career or occupational area, the largest percentage were employed as elementary or secondary school teachers (22.4%). Of the remainder, 17.7% were in management or administration, 7.1% held positions in counseling, 4.7% in social services, and equal portions were in each of six other fields including educational support services, marketing, sales and merchandising, publishing, research, and clerical positions.

By type of employer, 40.5% were employed in private business or industry, 20.2% were employed in government agencies, 35.7% were in education, and 2.4% were self-employed.

Although 45% had said their initial jobs were in their chosen career field, nearly 70% reported they were currently working in the field of their choice. Social Ecology respondents, as a group, reported about the same relationship of undergraduate education to their job as did the average respondent, and were relatively neutral when asked to evaluate their ability to perform their current job without their education.

V. THE CASE OF MINORITY GRADUATES

An analysis of the career and academic progress of UCI minority graduates over the period covered by the survey is possible. However, it should be noted that the number of minority respondents included in the survey results is small, thereby limiting the strength and depth of the analysis. Also, due to the rapid increase in the UCI minority student enrollment, the minority subgroup included in the survey results is not entirely representative of the current UCI minority student population. To illustrate this point, Tables 18 and 19 provide comparisons of the minority survey subgroup and the estimated minority undergraduate enrollment as of October, 1975 by school and program and by ethnic origin.

Minority respondents represented in the survey approximate only 7% (165) of all those answering the survey question concerning ethnicity. (See Table 20.) Somewhat larger concentrations of minority respondents occurred in Comparative Culture (20%), Engineering (11.9%), and Physical Science (10.3%). Smaller proportions occurred in Information and Computer Science (3.4%), Humanities (4.7%), Fine Arts (5.8%), and Social Ecology (6.0%). In terms of sex, minority female-male percentage almost exactly approximated the non-minority percentage: 46.3% were women and 53.7% were men.

Educational Attainment

In terms of graduate degrees or credentials either held or pursued, the minority subgroup of respondents exceeded the non-minority subgroup

TABLE 18.
COMPARISON OF SURVEY MINORITY SUBGROUP
WITH FALL 1975 ESTIMATED
UNDERGRADUATE MINORITY ENROLLMENT BY SCHOOL OR PROGRAM
(In percentages)

School or Program	October 1975 Estimate*	Career Experience Survey
Bio. Sci.	20.2%	7.6%
Comp. Cult.	43.2	20.0
Engr.	14.1	11.9
Fine Arts	14.8	5.8
Hum.	12.1	4.7
ICS	13.1	3.4
Phys. Sci.	14.1	10.3
Soc. Ecol.	19.7	6.0
Soc. Sci.	<u>17.9</u>	<u>6.2</u>
TOTAL	17.5%	7.0%

*Source: Ethnic Survey of U.C. Irvine Domestic Students, October 23, 1975

TABLE 19.
COMPARISON OF SURVEY MINORITY SUBGROUP
WITH FALL 1975 ESTIMATED
UNDERGRADUATE MINORITY ENROLLMENT BY ETHNIC MINORITY
(In percentages)

Ethnic Minority	October 1975 Estimate*	Career Experience Survey
Black	3.6%	1.9%
Chicano	4.2	.9
Oriental	5.2	3.0
Other	<u>4.5</u>	<u>1.2</u>
TOTAL	17.5%	7.0%

*Source: Ethnic Survey of U.C. Irvine Domestic Students, October 23, 1975

TABLE 20.
RESPONDENTS INDICATING ETHNIC MINORITY BY SCHOOL OR PROGRAM
(In percentages)

	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Hum.	ICS	Phys. Sci.	Soc. Ecol.	Soc. Sci.	Total
Asian Amer.	4.9%	3.5%	4.8%	1.1%	.8%	2.1%	6.9%	.7%	2.8%	3.0%
Black	1.4	5.3	4.8	1.5	2.2		1.5	1.4	1.8	1.9
Chicano	.6	7.0		1.1	.5		.8	1.4	1.0	.9
Native Amer.	.2	1.8		.4	.5	1.1		.7		.3
Unspecified	.5	2.4	2.3	1.7	.7	.2	1.1	1.8	.6	.9
TOTAL PERCENT MINORITY	7.6%	20.0%	11.9%	5.8%	4.7%	3.4%	10.3%	6.0%	6.2%	7.0%

in educational attainment. As Shown in Table 21, slightly larger percentages of minority respondents either held or were pursuing academic Master's degrees, medical degrees, and teaching credentials than were the non-minority respondents. Slightly lesser percentages of the minority subgroup, however, had chosen the pursuit of the Ph.D., law degrees, and professional Master's degrees.

TABLE 21. Graduate Degrees Held or Pursued

	<u>Minority Respondents</u>	<u>Non-Minority Respondents</u>
(N)	(165)	(2,199)
Academic Master's Degree	29.1%	19.3%
Professional Master's Degree	3.6	7.1
Academic Doctorate (Ph.D.)	6.1	8.7
Law Degree (J.D.)	2.4	5.6
Medical Degree (M.D.)	7.3	5.2
Other Professional Doctorate	3.6	3.6
Teaching Credential	21.8	19.9
Other Certificate or Credential	<u>4.8</u>	<u>5.5</u>
TOTAL	78.8%	74.9%

Survey results indicate that of the minority respondents pursuing graduate study at the time of the survey, over 80% were pursuing degrees in one of nine fields of study. (See Table 22.) While medicine, biological or health science, and social science fields, in that order, were the most frequently chosen fields for both minority and non-minority

TABLE 22.
MAJOR FIELDS OF CURRENT GRADUATE STUDY FOR
MINORITY AND NON-MINORITY RESPONDENTS
(In percentages)

(N)	Minority (74)	Non-Minority (826)
Medicine	14.9%	13.0%
Biological or Health Science	14.8	10.9
Social Science*	12.2	10.7
Business or Administration	10.9	9.2
Education	8.1	9.6
Physical Science	8.1	5.7
Engineering	5.4	2.4
Law	5.4	10.5
Humanities	4.1	5.3
Other	16.3	22.9
TOTAL	100.0%	100.0%

*Note: not including psychology

respondents, differences were evidenced in the ranking of other fields selected. Fields with greater minority representation included administration, physical sciences, and engineering. A smaller percentage of minority respondents had selected education, law, and humanities fields.

Initial Employment

Of all minority respondents, approximately 65% (107) reported having had at least one full-time job since graduating from UC Irvine. Of these, three-quarters found initial employment in one of nine occupational fields. (See Table 23.) With the exception of one field, the arts, which was not represented among the top nine for minorities, the fields selected included the same group of occupational categories most frequently selected by non-minority respondents but with differing frequencies.

While elementary and secondary school teaching ranked first for both groups, larger percentages of minority respondents reported initial employment in research, administration, and sales or marketing-related fields than did non-minorities. Fewer minority respondents reported initial employment in clerical jobs and computer science fields.

Although the difference was not substantial, the results of the survey indicate that the percentage of minority respondents finding initial employment in preferred career fields was slightly less than for

TABLE 23.
FIRST FULL-TIME JOB BY OCCUPATIONAL CATEGORY FOR
MINORITY AND NON-MINORITY RESPONDENTS
(In percentages)

(N)	Minority (107)	Non-Minority (1503)
Elementary or Secondary School Teaching	19.6%	14.7%
Research	15.9	8.6
Administration	11.2	8.4
Merchandising/Marketing/Sales	6.5	4.8
Engineering	6.5	6.4
Trade or Craft	4.7	4.4
Clerical	4.7	10.2
Computer Specializations	3.7	7.5
Finance or Banking	2.8	2.7
Other	<u>24.3</u>	<u>32.3</u>
TOTAL	100.0%	100.0%

non-minority respondents. At the same time, a slightly greater percentage of the minority subgroup indicated having not made a career choice at the time of obtaining their first full-time job.

FIRST JOB IN CHOSEN FIELD

	<u>Minority</u>	<u>Non-Minority</u>
Yes	50.5%	53.5%
No	33.6	33.8
Field not Chosen	<u>15.9</u>	<u>12.7</u>
	100.0%	100.0%

Current Employment

Ninety-nine (60%) minority respondents reported they were employed at the time of the survey. As an indication of the rate of unemployment, only 5.5% said that seeking employment was their primary activity at the time of the survey. This compares with a slightly higher percentage (5.9%) among the non-minority subgroup reporting they were looking for jobs.

By field of current employment, nearly 80% of the minority respondents were employed in one of eleven occupational or career fields. Table 24 shows the percentages of minority respondents employed in each of these fields and the corresponding number of non-minorities employed in each of the same fields. With the exception of one field, medical support services, the top five fields for the minority subgroup were also the most predominant among the non-minority group. At the same time,

TABLE 24.
CURRENT EMPLOYMENT BY OCCUPATIONAL CATEGORY
FOR MINORITY AND NON-MINORITY RESPONDENTS
(In percentages)

(N)	Minority (99)	Non-Minority (1,376)
Elementary or Secondary School Teaching	23.2%	16.7%
Research	16.2	7.1
Administration	10.1	10.8
Engineering	6.1	6.8
Medical Support Services	4.0	2.2
Clerical	4.0	5.5
Computer Specializations	3.0	7.8
Manufacturing	3.0	.7
Merchandising/Marketing/Sales	3.0	4.4
College Teaching	3.0	2.5
Social Services	3.0	1.8
Other	21.2	33.6
TOTAL	100.0%	100.0%

TABLE 25.
CURRENT JOB-TYPE OF EMPLOYING ORGANIZATION FOR
MINORITY AND NON-MINORITY RESPONDENTS
(In percentages)

	Minority	Non-Minority
Business or Industry	46.5%	51.9%
Government	15.2	15.0
Education	33.3	27.7
Self-Employed	3.0	4.5
Other	2.0	.9
TOTAL	100.0%	100.0%

significantly larger percentages of minority respondents were employed as elementary or secondary school teachers and in research activities than were the non-minority respondents. Computer specializations, which ranked third as a field of employment for non-minorities, ranked seventh for the minority subgroup.

Slightly fewer minority respondents were employed in private industry and slightly more were employed in educational institutions than were non-minorities. (See Table 25.) About the same number of both subgroups were employed in government. Three minority respondents (3%) were self-employed.

In terms of the percentage of survey respondents currently working in career fields of their choice and in terms of other factors related to education and work, there were no significant differences between the minority and non-minority subgroups. Also, as was true for the population of survey respondents as a whole, the percentage of minority respondents reporting employment in their chosen field at the time of the survey had increased substantially over the percentage initially finding career-related positions: just over 50% had initially secured positions in preferred fields, 69.5% were now in such fields.

VI. THE CASE OF TRANSFER STUDENTS

A comparison can be drawn between the career and academic experience of those graduates having transferred to UCI from two- and four-year institutions and those having come to the University directly from high school.

Of all those graduates responding to the survey question regarding transfer or non-transfer status, nearly one-half (1,120) reported having come to UCI directly from high school (UCI-only). Of the 47.2% having transferred to the University, 24.3% had transferred from two-year or community colleges and the remaining 22.9% had transferred from four-year colleges and universities.

The proportions of transfer student and non-transfer student populations varied somewhat by undergraduate school and program. (See Table 26.) Those schools and programs with a larger than average percentage of two-year college transfer student respondents included Engineering (31.1%), Comparative Culture (28.6%), and Information and Computer Science (28.0%). Those with a somewhat larger than average proportion of four-year transfer student respondents were Fine Arts (31.8%) and Humanities (27.0%). Those schools and programs with the largest UCI-only populations included Social Sciences (61.5%), Physical Sciences (59.8%), Social Ecology (57.4%), and Biological Sciences (57.1%).

TABLE 26.
TRANSFER STUDENTS BY UNDERGRADUATE SCHOOL OR PROGRAM
(In percentages)

	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Hum.	ICS	Phys. Sci.	Soc. Ecol.	Soc. Sci.	Total
(N)	(510)	(56)	(103)	(266)	(597)	(93)	(261)	(134)	(387)	(2407)
2-Year College Transfer	22.9%	28.6%	31.1%	25.6%	24.6%	28.0%	21.8%	20.1%	22.2%	23.9%
4-Year College Transfer	20.0	23.2	19.4	31.8	27.0	24.7	18.4	22.4	16.3	22.6
UCI Only	<u>57.1</u>	<u>48.2</u>	<u>49.5</u>	<u>42.8</u>	<u>48.4</u>	<u>47.3</u>	<u>59.8</u>	<u>57.4</u>	<u>61.5</u>	<u>53.5</u>
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE 27.
TRANSFER STUDENT RESPONDENTS BY SEX AND BY SCHOOL OR PROGRAM
(In percentages)

	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Hum.	ICS	Phys. Sci.	Soc. Ecol.	Soc. Sci.	Total
2-Year College Transfer										
Female	19.0%	66.7%	6.3%	66.2%	60.5%	11.5%	25.0%	59.3%	32.9%	40.0%
Male	81.0	33.3	93.8	33.8	39.5	88.5	75.0	40.7	67.1	60.0
4-Year College Transfer										
Female	32.4	69.2	—	82.1	70.8	30.4	27.1	86.7	46.0	55.1
Male	67.6	30.8	100.0	17.9	29.2	69.6	72.9	13.3	54.0	44.9
UCI Only										
Female	25.5	66.7	2.0	72.1	65.6	11.4	26.0	61.8	43.2	43.5
Male	74.5	33.3	98.0	27.9	34.4	88.6	74.0	38.2	56.8	56.5

Differences were also apparent in terms of sex. While three-fifths (60%) of the two-year subgroup were men, over one-half (55.1%) of the four-year subgroup were women. (See Table 27.)

Among several schools and programs there were significant differences in the male-female composition of the transfer student populations and the subgroup attending UCI only. These differences were most apparent in Social Ecology, where the four-year female transfer population exceeded the female component of the UCI-only subgroup by over 25%, and Information and Computer Science, where the proportion of women transferring from four-year institutions was nearly three times the proportion attending UCI only.

Educational Attainment

Results of the survey indicate that in terms of overall educational attainment beyond the Bachelor's degree, the two subgroups of transfer student respondents had fared equally as well as the subgroup of respondents who had only attended UC Irvine. More than 70% of the respondents of all three subgroups either held or were working toward at least one graduate degree or credential at the time of the survey.

Although not extensive, some differences were noted among the subgroups in terms of the type and level of degrees or credentials either held or pursued. (See Table 28.) While slightly larger proportions of the transfer student subgroup either held or were pursuing academic Master's

TABLE 28.
GRADUATE DEGREES OR CREDENTIALS HELD OR PURSUED
BY STUDENT SUBGROUP
(In percentages)

	2-Year College Transfer	4-Year College Transfer	UCI Only
(N)	(576)	(544)	(1,271)
Teaching Credential	23.3%	19.5%	18.0%
Academic Master's Degree	21.5	19.7	18.3
Professional Master's Degree	5.2	7.5	6.7
Academic Doctorate	6.6	7.7	10.1
Law Degree (J.D.)	4.0	6.1	6.1
Medical Degree (M.D.)	3.5	4.6	5.9
Other Professional Doctorate	3.1	1.4	2.1
Other Degree or Credential	<u>8.0</u>	<u>6.4</u>	<u>7.3</u>
TOTAL	75.2%	72.9%	74.5%

degrees and teaching credentials, the percentage having chosen to pursue an academic doctorate or a medical degree was less than for the UCI-only subgroup.

Table 29 focuses on the pursuit of graduate degrees (not including teaching or other credentials) and indicates the percentages of transfer and UCI-only respondents either working toward or holding degrees by undergraduate school and program. In terms of educational attainment, greater percentages of two-year college transfer respondents from Comparative Culture, Physical Sciences, Social Sciences, and Social Ecology had chosen the pursuit of graduate degrees than had those attending UCI only. In the case of Engineering, Humanities, and Biological Sciences, a greater proportion of those attending UCI only either held or were working toward graduate degrees than of those having transferred from a two-year college.

By field of current graduate study, survey results indicate the subgroups of transfer student respondents had selected fields of study similar to those selected by the UCI-only subgroup but in different proportions. (See Table 30.) More than 90% of the respondents of all three subgroups were pursuing degrees in one of fifteen fields of study. The five most frequently pursued fields for all three subgroups were the same, although in varying order. These included medicine, administration or business, social sciences, biological sciences, and law.

TABLE 29.
LEVEL OF GRADUATE DEGREES HELD OR PURSUED BY TRANSFER
AND NON-TRANSFER SUBGROUPS BY SCHOOL OR PROGRAM
(In percentages)

	Bio. Sci.	Comp. Cult.	Engr.	Fine Arts	Hum.	ICS	Phys. Sci.	Soc. Ecol.	Soc. Sci.	Total
2-Year College (N)	(117)	(16)	(32)	(68)	(147)	(26)	(57)	(27)	(86)	(576)
Transfer										
M.A. or M.S.	12.8%	37.5%	25.0%	10.3%	23.8%	15.4%	26.3%	22.2%	33.7%	21.7%
Ph.D.	11.1	6.3	—	—	3.4	—	15.8	11.1	7.0	6.4
Professional Master's Degree	2.6	—	9.4	13.2	6.1	7.7	—	—	7.0	5.6
Professional Doctorate	32.5	6.3	3.1	1.5	6.1	—	1.8	7.4	10.5	10.8
TOTAL	59.0%	50.1%	37.5%	25.0%	39.4%	23.1%	60.9%	40.7%	58.2%	44.5%
4-Year College (N)	(102)	(13)	(20)	(84)	(161)	(23)	(48)	(30)	(63)	(544)
Transfer										
M.A. or M.S.	20.6%	15.4%	35.0%	10.7%	19.3%	17.4%	22.9%	33.3%	22.2%	20.0%
Ph.D.	15.7	7.7	5.0	—	4.3	4.3	12.5	—	15.9	7.7
Professional Master's Degree	1.0	23.1	10.0	13.1	6.8	4.3	6.3	3.3	11.1	7.5
Professional Doctorate	28.4	15.4	—	3.6	10.6	4.3	6.3	10.0	11.1	12.1
TOTAL	65.7%	61.6%	50.0%	27.4%	41.0%	30.3%	48.0%	46.6%	60.3%	47.3%
UGI Only (N)	(290)	(27)	(50)	(111)	(282)	(44)	(154)	(76)	(237)	(1271)
Transfer										
M.A. or M.S.	16.6%	25.9%	38.0%	9.9%	21.6%	20.5%	19.5%	11.8%	18.1%	18.6%
Ph.D.	13.4	3.7	8.0	1.0	9.6	6.8	24.0	3.9	5.5	10.1
Professional Master's Degree	3.4	—	10.0	14.4	6.7	2.3	3.9	5.3	10.1	6.7
Professional Doctorate	32.1	7.4	4.0	2.7	9.2	—	7.8	10.5	14.8	14.2
TOTAL	65.5%	37.0%	60.0%	23.0%	47.1%	29.6%	55.2%	31.5%	48.5%	49.6%

TABLE 30.
MAJOR FIELDS OF CURRENT GRADUATE STUDY FOR 2-YEAR,
4-YEAR TRANSFER AND UCI ONLY STUDENTS
(In percentages)

(N)	2-Year College Transfer	4-Year College Transfer	UCI Only
	(167)	(169)	(432)
Medicine	10.8%	11.2%	16.7%
Administration/Business	10.8	10.6	8.3
Social Science	9.6	9.5	9.0
Biological Science	9.0	10.7	10.0
Law	9.0	14.8	12.0
Physical Science	7.2	3.6	7.4
Psychology	6.0	6.5	3.5
Health Science	6.0	1.2	2.3
Humanities	4.8	4.1	6.3
Education	4.8	4.1	5.6
Engineering	4.8	3.0	2.3
Counseling	4.5	1.8	.9
Library Science	2.4	2.4	1.2
Fine Arts	1.8	6.5	3.9
Computer Science	1.8	1.8	2.3
All Other	8.5	6.4	8.1
TOTAL	100.0%	100.0%	100.0%

Initial Employment

Results of the survey indicate that in terms of finding initial jobs in career fields of their choice, both groups of transfer student respondents reported slightly more success than those attending UCI only. (See Table 31.) While 51.3% of the UCI-only subgroup reported initial employment in fields of their choice, the percentage was 57% for the four-year transfer subgroup and 54.7% for those coming to UCI from two-year colleges. In addition, a somewhat larger percentage of the UCI subgroup (15.8%) than the two-year (11.1%) or four-year (8.6%) transfer student subgroups had not chosen a career field at the time of initial employment.

By undergraduate school and program, the subgroup of four-year transfer students, in all cases except that of Social Sciences, reported the most success in finding initial employment in the career field of their choice. Two-year college transfer students also reported more success in terms of securing initial jobs in fields of their choice, with the exception of those in Humanities, Social Ecology, and Social Sciences.

In all cases except Fine Arts, somewhat larger percentages of those respondents attending UCI only reported they had not made a career decision by the time they sought initial employment.

TABLE 31.
FIRST JOB - IN PREFERRED CAREER FIELD FOR TRANSFER AND
UCI-ONLY STUDENT SUBGROUPS
(In percentages)

	2-Year College Transfer		4-Year College Transfer		UCI Only	
	Yes	Field Not Chosen	Yes	Field Not Chosen	Yes	Field Not Chosen
Bio. Sci.	54.2%	5.6%	68.8%	3.1%	47.5%	13.7%
Comp. Cult.	63.6	9.1	37.5	0.0	27.3	22.7
Engr.	96.6	1.1	93.8	1.1	80.9	2.2
Fine Arts	53.5	7.0	47.9	10.4	47.2	6.9
Hum.	37.1	18.1	44.4	10.3	42.9	20.5
ICS	95.5	0.0	95.0	0.0	92.3	5.1
Phys. Sci.	65.1	14.0	66.7	5.6	57.8	17.6
Soc. Ecol.	33.3	11.1	57.1	14.3	46.2	19.2
Soc. Sci.	49.2	14.3	47.7	15.9	50.0	18.0
TOTAL	54.7%	11.1%	57.0%	8.6%	51.3%	15.8%

TABLE 32.
CURRENT EMPLOYMENT BY OCCUPATIONAL CATEGORY FOR
TRANSFER AND UCI-ONLY STUDENT SUBGROUPS
(In percentages)

(N)	2-Year College Transfer (387)	4-Year College Transfer (330)	UCI Only (767)
Elementary or Secondary School Teaching	18.1%	18.2%	16.0%
Administration	10.6	12.4	10.8
Engineering	8.3	4.5	7.0
Computer Specializations	7.2	8.8	7.4
Merchandising/Marketing/Sales	5.7	3.9	3.8
Research	5.4	9.4	8.3
Clerical	5.4	5.8	5.5
College Teaching	3.9	2.1	2.0
Trades or Crafts	3.9	4.2	2.6
Arts	3.1	5.2	2.7
Transportation	2.6	1.2	1.7
Protective Services	2.6	.6	.7
Medicine	1.3	2.4	2.1
Law	1.0	2.4	2.1
Other	20.9	18.9	27.3
TOTAL	100.0%	100.0%	100.0%

Current Employment

A total of 387 (67.2%) two-year transfer and 330 (60.7%) four-year transfer respondents reported they were currently employed. As an indication of the rate of unemployment, 7.1% of the two-year transfer subgroup indicated that seeking employment was their primary activity at the time of the survey. This compared with a slightly lower percentage for both the four-year transfer (5.6%) and the UCI-only (5.3%) subgroups.

By field of current employment, approximately four-fifths of the two-year and four-year transfer subgroups were employed in fourteen broad occupational or career fields. Table 32 indicates the percentage of two-year transfer respondents in each of these fields and the corresponding percentages of four-year transfer and UCI-only respondents employed in each of these same occupations. Although the differences are not great, survey results indicated slightly more two-year transfer respondents than those attending UCI only, were employed in elementary or secondary school teaching, engineering, merchandising or sales, college teaching, and in trades or crafts. Fewer were employed in administration, computer specializations, research, medicine, and law. With regard to the four-year transfer subgroup, more were employed in elementary or secondary school teaching, administration, computer specializations, research and the arts than were those attending UCI only. Fewer were employed in engineering and about the same proportions were in medicine and law.

In terms of type of employer, with little exception, both the two-year and the four-year transfer subgroups were employed in approximately the same proportions in business, government, and education as were the UCI-only respondents. (See Table 33.) However, a slightly greater proportion of both transfer subgroups reported employment in education and fewer reported employment in government than did those attending UCI only.

As a positive indication of career progress, substantially greater proportions of all three subgroups were currently employed in career fields of their choice than at the time of initial employment. (See Table 34.) Of all three subgroups, the four-year transfer respondents reported the highest rate of preferred employment, with 73.3% indicating they were currently employed in their chosen field. They were followed closely by the subgroup of two-year transfer respondents with 72.5% indicating they were working in fields of their choice. Of those attending UCI only, 68.9% indicated current employment in their chosen field.

Finally, the survey results indicated no significant differences between the subgroups of transfer student respondents and those attending UCI only in terms of the relevance of their undergraduate education to their current job, job performance without their undergraduate education, and job satisfaction.

TABLE 33.
CURRENT JOB - TYPE OF EMPLOYING ORGANIZATION FOR TRANSFER
AND UCI-ONLY STUDENTS
(In percentages)

	2-Year College Transfer	4-Year College Transfer	UCI Only
Business or Industry	50.3%	53.2%	51.7%
Government	14.6	12.4	16.2
Education	31.0	28.7	26.1
Self-Employed	3.8	4.8	4.6
Other	.3	.9	1.4
TOTAL	100.0%	100.0%	100.0%

TABLE 34.
CURRENT JOB - IN PREFERRED CAREER FIELD FOR TRANSFER AND
UCI-ONLY STUDENT SUBGROUPS
(In percentages)

	2-Year College Transfer	4-Year College Transfer	UCI Only
Bio. Sci.	66.0%	75.5%	66.4%
Comp. Cult.	72.7	33.3	40.0
Engr.	93.1	100.0	89.2
Fine Arts	65.8	70.7	58.5
Hum.	61.1	64.4	65.5
ICS	95.5	90.0	97.3
Phys. Sci.	84.1	79.4	79.8
Soc. Ecol.	68.8	73.7	60.9
Soc. Sci.	74.8	75.7	66.2
TOTAL	72.5%	73.3%	68.9%

APPENDIX A. QUESTIONNAIRE

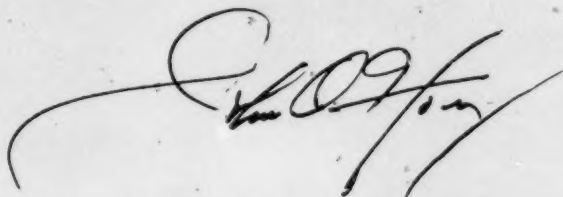
Career Experiences of UCI Graduates

Dear Graduate:

Now that the Irvine campus is completing its first decade, we want to know more about the career and educational experiences of our graduates. Your candid responses to this brief questionnaire, which will remain anonymous, will enable us to develop a comprehensive picture of the varied paths our alumni have taken. The information you provide will help current undergraduates make better career decisions and will be a valuable resource in campus planning.

We hope that the 10-15 minutes it takes you to complete the questionnaire will be more fun than a chore, and that you will get it back to us as soon as possible. The greater the response rate, the more certain we will be that the survey's findings give an accurate picture. You can find out the results by reading the article we plan to publish next fall in *Seed*, the UCI alumni journal. A complete analysis and tabulations will be presented in a report to the campus community. For your convenience, a postage-paid envelope has been enclosed.

Thank you for your cooperation.



John C. Hoy
Vice Chancellor—Student Affairs

For each question, place an X in the box that corresponds to the most appropriate alternative or write your response in the space provided. Please disregard the small numbers that appear throughout the questionnaire; we will use them to code your responses.

A. EDUCATION

1. From which of UC Irvine's schools or programs did you receive your bachelor's degree? (If you had an inter-school double major, please identify both schools.)

1[] Biological Sciences	4[] Fine Arts	7[] Physical Sciences	1/1
2[] Comparative Culture	5[] Humanities	8[] Social Ecology	
3[] Engineering	6[] Information and Computer Science	9[] Social Sciences	

2. In which month and year did you receive your bachelor's degree? _____ month _____ year 2

3. What graduate or professional degrees do you hold? _____ leave blank 3-6

Degree	Year awarded	Institution	Major field	8
_____ 9-10	_____ 11-12	_____ 13-15	_____ 16-18	
_____ 19-20	_____ 21-22	_____ 23-25	_____ 26-28	

4. What state-issued licenses and credentials do you hold? (for example: engineer, lawyer, nurse, physician, teacher)

License or credential	Year issued	License or credential	Year issued
_____ 29-30	_____ 31-32	_____ 33-34	_____ 35-36

5. Are you currently enrolled in an educational program for which you will be awarded a degree or credential?

1[] Yes 2[] No If "No," please skip to section B. 37

- 5a. What degree or credential are you seeking?

Degree or credential	Year expected	Institution	Major field	45-47
_____ 38-39	_____ 40-41	_____ 42-44	_____ 45-47	

- 5b. How do you rate your chances of finding employment in the career field of your choice when you complete this program? (Circle the appropriate number.)

Very poor		Very good	6[] You are currently employed in the career field of your choice.	48
1	2	3	4	5

B. INITIAL FULL-TIME EMPLOYMENT AFTER GRADUATION

If you have *not* held a full-time position since graduating from UC Irvine, please check here [] and skip to section D. 50

1. What was the *first full-time* position you held after graduating from UC Irvine? (Use descriptive title; for example: computer programmer, law clerk, personnel analyst trainee, real estate agent).

_____ 51-53

2. What type of organization did you work for?

1[] Private business or industry	
2[] Governmental agency	
3[] Educational institution	
4[] Other; please specify. _____	54

3. What was the nature of the organization's activity? (for example: architectural consulting, electronics manufacturing, high school, hospital) _____ 55-57
4. When did you begin working for this organization? _____ month _____ year 58-59
60-61
5. Please describe how you found this position. 62-63
6. How many months did you spend actively looking for employment before you found this position? _____ months 64-65
7. What was your starting annual salary in this position (to the nearest \$100)? \$ _____ /year 56-68
8. Was this position in the organization where you are currently employed?
1 ☐ Yes 2 ☐ No 3 ☐ You are not currently employed. 69
9. Was this position in the career field of your choice at the time you accepted it?
1 ☐ Yes 2 ☐ No 3 ☐ You had not chosen a career field. 70
- 9a. If "Yes," to what extent did part-time or summer work experience during the time you were a student at UC Irvine contribute to your success in finding a job in the career field of your choice? (Circle the appropriate number.)
- | | | | | | | | |
|---------------|---|---|---|-------------------------|--|---|----|
| Not at
all | | | | Directly
responsible | | 6 ☐ You did not have part-time or summer work. | |
| 1 | 2 | 3 | 4 | 5 | | | 71 |

C. CURRENT EMPLOYMENT

If you are *not* currently employed, please check here ☐ and skip to section D. 73

1. What is your present occupation? (Use descriptive title.) _____ 74-76
2. What is the name of the organization you work for? _____ 77-79
3. What type of organization do you work for?
1 ☐ Private business or industry
2 ☐ Governmental agency
3 ☐ Educational institution
4 ☐ Other; please specify. _____ 80
4. What is the nature of the organization's activity? _____ leave blank 2/1-6
8-10
5. What is the zip code for your *employment location*? (This is the most convenient way to identify your location. If you don't know your zip code, please indicate the city and state in which you work.) _____ 11-15
6. When did you begin working for this organization? _____ month _____ year 16-17
18-19
7. Please describe how you found this position. 20-21

8. Are you currently working 1[] Full-time? 2[] Part-time? 22
9. Is this position in the career field of your choice? 1[] Yes 2[] No 23
10. What is your annual salary (to the nearest \$100)? \$ _____/year 24-26
11. To what extent are the skills you acquired through your undergraduate education at UC Irvine related to your present occupation or career?
(Circle the appropriate number.)
- | | | | | | | |
|-------------|---|---|---|---|-----------------|----|
| Not related | | | | | Closely related | |
| 1 | 2 | 3 | 4 | 5 | | 27 |
12. To what degree are your chances for promotion limited by the extent and field of your education?
- | | | | | | | |
|-------------|---|---|---|---|------------------|----|
| Not limited | | | | | Severely limited | |
| 1 | 2 | 3 | 4 | 5 | | 28 |
13. How well could you perform in your present occupation without benefit of your college education?
- | | | | | | | |
|-------------|---|---|---|---|-----------|----|
| Very poorly | | | | | Very well | |
| 1 | 2 | 3 | 4 | 5 | | 29 |
14. How satisfied are you with your present occupation or career?
- | | | | | | | |
|-------------------|---|---|---|---|----------------|----|
| Very dissatisfied | | | | | Very satisfied | |
| 1 | 2 | 3 | 4 | 5 | | 30 |
15. Are you presently seeking other employment? 1[] Yes 2[] No 31
- 15a. If "Yes," are you looking for a position 1[] In the same field? 2[] In a different field? 32
16. In the space below, please describe any experiences you had as an undergraduate at UC Irvine that have been particularly valuable in your career.

D. BACKGROUND

1. What is the *principal activity* you are engaged in at the present time? (Please check only one alternative.)
- 1[] Employed (including service in the military, VISTA, and the like)
- 2[] Seeking employment
- 3[] Attending a college or university
- 4[] Managing your home and/or rearing your children
- 5[] Other; please describe. _____ 34
2. Sex 1[] Female 2[] Male 35 3. Age _____ 36-37
4. Marital status 1[] Single 2[] Married 38
5. Did you transfer to UC Irvine from another college? 1[] Yes 2[] No 39
- 5a. If "Yes," please indicate the type of institution you attended.
- 1[] A four-year college or university
- 2[] A two-year college
- 3[] Other; please describe. _____ 40
6. Are you a member of an ethnic minority? 1[] Yes 2[] No 41
- 6a. If "Yes," please describe. _____ 42

APPENDIX B. METHODOLOGY

On April 25, 1975 questionnaires were received by 4,905 individuals. Following, on May 14, 1975, reminder post cards were sent. As of July 15, 1975, 2,479 questionnaires were returned, a response rate of 51%. The returned questionnaires were then coded and materials were prepared for computer processing analysis of the data.

Table 35 shows the number of survey responses by year, and by school or program compared with the actual number of degrees awarded. The total number of responses received represents 40.8% of all bachelor's degrees awarded over the survey period (1965-66 through 1973-74).

By school or program, the number of actual responses fell short of the original estimate for Engineering and Social Ecology, was about equal for Biological Sciences, Fine Arts and ICS, but substantially exceeded our estimates for all other schools.

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- | | | | | | | |
|--|-------------|---|---|---|-----------------|----|
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- | | | | | | | |
|--|-------------|---|---|---|------------------|----|
| | Not limited | | | | Severely limited | |
| | 1 | 2 | 3 | 4 | 5 | 28 |
13. How well could you perform in your present occupation without benefit of your college education?
- | | | | | | | |
|--|-------------|---|---|---|-----------|----|
| | Very poorly | | | | Very well | |
| | 1 | 2 | 3 | 4 | 5 | 29 |
14. How satisfied are you with your present occupation or career?
- | | | | | | | |
|--|-------------------|---|---|---|----------------|----|
| | Very dissatisfied | | | | Very satisfied | |
| | 1 | 2 | 3 | 4 | 5 | 30 |
15. Are you presently seeking other employment? 1[] Yes 2[] No 31
- 15a. If "Yes," are you looking for a position 1[] In the same field? 2[] In a different field? 32
16. In the space below, please describe any experiences you had as an undergraduate at UC Irvine that have been particularly valuable in your career.

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By school or program, the number of actual responses fell short of the original estimate for Engineering and Social Ecology, was about equal for Biological Sciences, Fine Arts and ICS, but substantially exceeded our estimates for all other schools.

TABLE 35.
RESPONSES TO SURVEY ADMINISTERED TO RECIPIENTS OF BACHELOR'S DEGREES FROM UC IRVINE
ALL RESPONDENTS - 1966-74

School	Total		Biological Sciences		Comparative Culture		Engineering		Fine Arts		Humanities		I.C.S.		Physical Sciences		Social Ecology		Social Sciences	
	Deg.	Ret.	Deg.	Ret.	Deg.	Ret.	Deg.	Ret.	Deg.	Ret.	Deg.	Ret.	Deg.	Ret.	Deg.	Ret.	Deg.	Ret.	Deg.	Ret.
NR**		11		1								2		2				5		1
1965-66	10	3	1	0					3	1	2	1			3	0			1	1
1966-67	121	40	16	5					18	8	41	12			20	5			26	10
1967-68	197	67	38	15			5		23	6	80	24			23	10			28	12
1968-69	566	202	126	38*			31	14	64	23	184	69*	2	1	68	20			91	37*
1969-70	616	243	99	38*	27	8	17	10	78	22	214	91*	7	1	51	25			113	48*
1970-71	761	275	138	54*	26	3	25	10	128	35*	213	77*	16	7	73	30*	16	9	126	50*
1971-72	1,078	446	210	99*	53	18	40	21	152	44*	274	95*	33	22	97	53*	34	20	185	74*
1972-73	1,108	516	231	108*	43	8	41	22	167	61*	296	116*	50	32	106	58*	51	27	195	84*
1973-74	1,423	628	295	154*	57	20	49	27*	176	69*	309	116*	55	29*	130	60*	147	76*	205	77*
TOTAL	5,952	2,479	1,154	519	206	58	208	105	809	279	1,613	615	163	94	581	264	248	140	970	405
USABLE COHORTS*				6		0		1		4		6		1		4		1		6

*A cohort (the students who graduated from a particular school or program during an academic year) can be used in the analysis if it includes at least thirty respondents.

**Year not reported.

APPENDIX C. DEMOGRAPHIC PROFILE

Table 36 shows a demographic profile of the entire population of respondents. It should be noted that while just over one half of the total population of respondents reported employment as their primary activity at the time of the survey, over 80% of the Engineering and ICS respondents reported employment as their primary activity. Biological Sciences graduates responding far exceeded the graduates of other schools and programs in the percentage primarily attending college at the time of the survey; while those in Comparative Culture and Fine Arts more frequently were seeking jobs as their primary activity than respondents in other schools.

TABLE 36.
DEMOGRAPHIC PROFILE OF RESPONDING POPULATION
ALL RESPONDENTS 1966-74

	Total	Bio. Sci.	Comp. Cult.	Eng.	Fine Arts	Hum.	ICS	Phys. Sci.	Soc. Ecol.	Soc. Sci.
Age										
Mean	26.0	25.2	26.2	26.7	26.6	27.0	25.4	25.4	25.8	25.7
Range	21-70	20-62	22-45	22-52	19-53	21-70	22-52	21-43	21-54	22-54
Sex (%)										
Female	43.3	25.5	67.3	2.9	73.8	65.8	16.0	25.8	65.4	41.0
Male	54.7	74.5	32.7	97.1	26.2	34.2	84.0	74.2	34.6	59.0
Marital Status (%)										
Single	57.0	62.5	68.5	51.5	56.6	54.1	59.1	49.6	71.2	54.3
Married	43.0	37.5	31.5	48.5	43.4	45.9	40.9	50.4	28.8	45.7
Ethnic Minority (%)	7.0	7.6	20.0	11.9	5.8	4.7	3.4	10.3	6.0	6.2
Principal Activity Engaged In At Time Of Survey (%)										
Employed	55.6	41.6	50.0	82.4	45.3	59.0	80.9	61.2	51.1	60.8
Seeking Employment	5.8	4.1	14.3	2.0	13.7	6.2	2.1	3.1	5.3	4.7
Attending College	29.1	50.5	26.8	12.7	17.6	21.8	14.9	32.6	28.6	25.8
Managing a home	4.8	1.0	3.6		12.5	8.1		1.9	6.0	3.9
Other	4.7	2.8	5.4	2.9	10.9	4.9	2.1	1.2	9.0	4.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0